DOCUMENT RESUME

ED 045 980 AL 002 706

AUTHOR	Slager, William R., Ed.; Madsen, Betty M., Ed.
TITLE	English for American Indians.
INSTITUTION	Utah Univ., Salt Lake City.
SPONS AGENCY	Bureau of Indian Affairs (Dept. of Interior), Washington, D.C.
PUB DATE	70
NOTE	96p.; A Newsletter of the Office of Education Programs, Bureau of Indian Affairs, United States Department of the Interior
EDRS PRICE	EDRS Price MF-$0.65 HC-$3.29
DESCRIPTORS	American Indian Languages, *American Indians, Annotated Bibliographies, *Bilingual Education, Bilingual Students, *Child Language, Dialect Studies, Disadvantaged Youth, Instructional Materials, *Language Instruction, Navaho, Second Language Learning, Spanish Speaking
IDENTIFIERS	Shoshoni

ABSTRACT

The present issue of "English for American Indians" follows the format and approach of the Spring 1970 issue. (See ED 040 396.) In the lead article, Evelyn Hatch surveys some of the research in first language acquisition and points out its implications for second language teaching. Her main thesis is that with the best of intentions, teachers often insist that children in English-as-a-second-language classes achieve a mastery of certain structures that is beyond the mastery achieved by "advantaged" middle class children who speak English natively. Following her article, she reviews three new books on child language. Bilingualism is the subject of most of the items included in "Information Exchange," which describes important surveys of the field, discusses the need for bilingual programs and presents a definition of their structure, and reports on individual programs for American Indian children. A special section of "Information Exchange" deals with the American Indian languages themselves, with maps, lists of the most widely spoken Indian languages and Summer Institute of Linguistics linguists working on them, and a brief report of a study of social factors involved in Shoshoni dialect variation. Two sets of materials are worked on: the CITE materials for Navajo children, and the Michigan Migrant Workers Council materials for Spanish-speaking children. (AMM)

U.S. DEPARTMENT OF HEALTH, EDUCATION
& WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

ED0 45980

AC 002 706

ENGLISH FOR AMERICAN INDIANS

A Newsletter of the Office of Education Programs

Bureau of Indian Affairs

FALL — 1970

ED045980

ENGLISH FOR AMERICAN INDIANS

A Newsletter of the Office of
Education Programs
Bureau of Indian Affairs
United States Department of the Interior

March 3, 1849

UNIVERSITY OF UTAH

William R. Slager, Editor
Betty M. Madsen, Assistant Editor

FALL 1970

United States Department of the Interior

Walter J. Hickel, Secretary

BUREAU OF INDIAN AFFAIRS

Louis R. Bruce, Commissioner

OFFICE OF EDUCATION PROGRAMS

Wilma L. Victor, Acting Director

Division of Curriculum Development and Review

Thomas R. Hopkins, Chief

March 3, 1849

ENGLISH FOR AMERICAN INDIANS is a newsletter intended for teachers and other educators who are involved with the teaching of English in the educational system of the Bureau of Indian Affairs. It is prepared for the BIA by the University of Utah, Salt Lake City, Utah 84112, under the direction of William R. Slager and Betty M. Madsen. Correspondence concerning distribution and editorial content should be directed to Mr. Tom Hopkins, Division of Curriculum Development and Review, Office of Education Programs, Bureau of Indian Affairs, 1951 Constitution Avenue, N. W., Washington, D. C. 20242

Cover design courtesy The Smithsonian Institution

TABLE OF CONTENTS

Page

Foreword v

Editor's Note vii

THE LANGUAGE CHILDREN USE: A LOOK AT THE FACTS, by Evelyn Hatch 1

Book Reviews, by Evelyn Hatch

The Acquisition of Syntax in Children from Five to Ten, by Carol Chomsky 15

Sentences Children Use, by Paula Menyuk . . 17

Language Development: Form and Function in Emerging Grammar, by Lois M. Bloom . 19

INFORMATION EXCHANGE: REPORTS AND REVIEWS

Bilingualism

BIA Projects

ESL Help for Teachers in the Navajo Area, by Gina P. Harvey 23

Navajo Kindergarten, by Muriel Saville 26

The Demonstration School at Rough Rock. 27

Dine Bolta Association Teacher Training Workshop, by Anita B. Pfeiffer . . 28

Bilingual Project in Alaska 29

BIA Curriculum Bulletin No. 4 30

Bilingual Projects Under Title VII 31

Handbook of Bilingual Education, by Muriel Saville and Rudolph C. Troike 37

"Bilingual Education: A Special Report from CAL/ERIC," by A. M. Malkoc and A. H. Roberts 39

Description and Measurement of Bilingualism, edited by L. G. Kelly 40

"A Typology of Bilingual Education," by William F. Mackey 41

Foreign Language Annals 44

"Statement on Bilingualism," by A. Bruce Gaarder 45
Reading Comprehension in Bilingual Programs. . 47
Bilingual Schooling in the United States, by Theodore Andersson and Mildred Boyer . . 49

Contrastive Analysis

Contrastive Linguistics and Its Pedagogical Implications. 19th Georgetown Round Table 51
"Contrastive Linguistics at the CAL" 53
"Contrastive Analysis Hypothesis," by Ronald Wardhaugh 55

Indian Languages

Map, Indians in the United States Today . . . 58
SIL Linguists Currently Working in the Field with American Indians 59
American Indian Languages Now in Use 61
Map, Cultural Areas and Tribal Locations . . . 66
Map, Language Groups of North America 67
Grammars for Navajo 68
Social Factors in the Development of Shoshoni-Panamint Dialects 69

MATERIALS

A New Curriculum for Navajo Beginners 71
Michigan Migrant Primary Interdisciplinary Project 79

FOREWORD

A student of schooling American Indian children soon learns that innovation comes in cycles. What was new at one point in the past somehow dropped out of practice only to emerge in contemporary times as an innovation. This is the case regarding bilingual education for American Indian education. Ever since formal education was first offered native Americans it has come and gone and now, fortunately, is with us again.

Bilingual education seems to foster a certain excitement. Perhaps it is the deepening of understanding between children and teachers. On the other hand, it may be the realization by Indian children and their parents that the tribal language, that aspect of their cultural and personal lives that tells most about them, has been accorded the dignity that accompanies becoming a part of the school curriculum. Whatever the reason, it is important to keep in mind that bilingual education has the potential for achieving goals that schools have long espoused. In this day and age, when there is so much of the negative in life, as educators, we are indeed fortunate to have American Indian languages available for schooling purposes. After all, Indian languages are as truly Americana as any feature of this country and efforts to make them a part of the school program are encouraged and accorded a deserved priority.

Wilma L. Victor
Acting Director, Education Programs

EDITOR'S NOTE

The present issue of EFAI follows closely the format and approach of the spring issue of 1970. There we announced our policy of focusing in some detail on topics of current concern in the planning and development of language programs and of raising in the course of the reviews and reports some of the essential questions that must be considered by supervisors, teachers, and those responsible for preparation of materials. For this issue we have confined ourselves largely to two topics--language acquisition and bilingualism.

In the lead article, Dr. Evelyn Hatch surveys some of the research that has been done in first language acquistion and points out its implications for second language teaching. Her main thesis is that with the best of intentions we have often insisted that our children in ESL classes achieve a mastery of certain structures that is beyond the mastery achieved by "advantaged" middle class children who speak English natively. She also points out that currently available ESL materials do not take into account the research that has been done in child language when they make decisions about the selection and sequencing of grammatical content. Following her article, Dr. Hatch reviews three new books on child language that have made significant contributions to the field. Dr. Hatch is on the staff of the English Department at UCLA and is consultant to the Southwest Regional Laboratory for Educational Resources and Development (SWRL) in Los Angeles. Two of her studies (_Four Experimental Studies in the Syntax of Young Children_, and _The Five Year Old's Comprehension of Expanded and Transformed Conjoined Sentences_, with J. Sheff and D. T. Chastain) have been published by SWRL.

Bilingualism is the subject of most of the items included in the "Information Exchange." Here we have mentioned important surveys of the field as a whole; we have summarized significant statements about the need for bilingual programs and a definition of their structure, and we have reported briefly on individual programs that are designed for American Indian children.

However widely they may differ in design, all bilingual programs have one element in common--all of them must, in some way or other, take two languages into account. Where the child comes to school with a dominant home language other than English, most linguists would maintain that effective materials and techniques must be based at least in part on a comparison and contrast of the two languages. This is why we have reported briefly on three articles which will familiarize our readers with the well-known contrastive studies that are available and with some of the theoretical issues presently being debated by linguists concerned with approaches to contrastive analysis.

A final section under the Information Exchange deals with the American Indian languages themselves. Here, in addition to maps which show where the languages are used, we have included a list of the most widely spoken Indian languages and a list of SIL linguists who are working on American Indian languages, some of whom are already being consulted in the preparation of literacy materials for bilingual programs. Included also is a brief report of a study of social factors involved in dialect variation of Shoshoni. While dialect variation in English has received a good deal of attention of late, dialect variation within American Indian languages has until recently been neglected.

Our readers familiar with the subject hardly need be reminded of the scarcity of teaching materials available for the bilingual classroom. In our "Materials" section, we have chosen to report in some detail on two sets of materials which are quite different in approach. The CITE materials, which are presently being developed for the Navajo by Dr. Robert Wilson and his staff, have a number of innovations, chief among them perhaps the idea of a total curriculum based on two assumptions: that all subjects must be introduced through language that has been carefully taught, and that "ESL" cannot succeed if it is taught as an isolated subject and divorced from the other content areas. The role of the first language, then, seems to be largely that of providing a bridge for the introduction of new concepts and ideas as well as an instrument for developing the child's self-image and identity. For this reason the materials would be readily adaptable to other situations where the dominant home language is to be so used.

Since much more has been done to date in Spanish, we have also included a review of the oral language program developed by the Michigan Migrant Workers Council, under the direction of Ralph Robinett. Here the emphasis on the "other" language is much more evident, for all basic concepts are first taught in Spanish.

We conclude with a plea to our readers to suggest topics and to supply information about projects in which they are involved. Sources of support for new programs are many --state and county governments, federal agencies, tribal councils, etc. For this and other reasons it is often difficult to learn of the new projects that are being developed, and it is even more difficult to find out detailed information about goals, over-all design, and approach. Only through your cooperation can we hope to make this Newsletter a genuine forum for the exchange of ideas by those most concerned with the teaching of English to American Indians.

William R. Slager
Betty M. Madsen
University of Utah
Salt Lake City, Utah 84112

THE LANGUAGE CHILDREN USE: A LOOK AT THE FACTS

by Evelyn Hatch

Each year many ESL teachers come back to the class room armed with new techniques we have learned at summer institutes or with new materials which both incorporate language-learning techniques and supply enough variety in activities --language teaching games, songs, stories, puppet plays, etc.--to keep lively children interested. With these materials and techniques, many of us confidently begin a new year working again on accurate pronunciation (ship vs. sheep), subject-verb agreement, the pronoun system, and the mass of other distinctions which the child must "master" before progressing to more difficult structures. Then we find, as the months pass, that many of the children are not meeting our expectations (or the criterion tests) on these "easy" items and we begin to question the method, the materials, our own teaching ability, or even the intelligence of our students.

The fact is that a large number of these problems cannot be blamed on faulty methods, materials, teaching ability or on the "disadvantaged" child. A few hours spent listening to the speech of the "advantaged" Anglo child in any kindergarten, first, second, or third grade may hold the answer to many of these problems for us. And a careful examination of research in first language acquisition can answer even more. For many of the items that we try so hard to get our students to master are those all children, even native speakers, have trouble with.

Perhaps so little attention has been paid to this obvious area of comparison because of constant reassurances that the Anglo child has, on entering school, "mastered his language" or that the child "knows his language by the age of five." Such statements have been swallowed whole by all of us. And this has led us to believe that the only meaningful criteria for sequencing lessons or for setting "mastery" standards must be pedagogical (in which structures build on previously taught structures) or contrastive (in which structures will be difficult for the child because of likely interference from his first language.)

Searching for evidence to show that these claims about first language "mastery" by age five are true, we look to such famous studies as Jean Berko's on the child's learning of English morphology or to the paragraphs in Chomsky, Lenneberg, and other sources where language acquisition is described as an amazing 30-month process made possible by wired-in abilities set off by physical maturation. A closer look at these sources, however, shows that no such sweeping claims on complete language mastery are made by the authors. Berko's data, for example, shows that only 28 percent of the responses given by children for plurals using the /ɨz/ form were correct and approximately half of their responses on simple present tense were not standard forms. Bellugi-Klima and others investigating early childhood language have, in fact, emphasized again and again that the child has mastered his language, but that it is his language that he has mastered and the rules of child language are not necessarily the same as those of an adult. While he may produce all kinds of sentences, there is no guarantee that the sentences would meet either adult standards or those that the ESL teacher tries to set for her young students. How many of us, for example, would be pleased if only 28 percent of the responses given by our students in an /ɨz/ plural practice were correct?

Certainly the child has established a truly impressive language framework by the age of four or five, but many children have not mastered complex structures nor have they made many of the finer discriminations in features that we try to teach elementary ESL learners. Current research in child language shows us how questionable our assumptions about the child's "mastery" of language are.

Current research and research methodology has its roots in the early work of Roger Brown at Harvard, who, with his students, recorded the language development of three children, the now-famous Adam, Eve, and Sarah. The amount of data collected in this observational study (data acquired by observing and recording the language development of a child over a long period of time) was overwhelming. Separate parts of the data--the development of the noun phrase, question forms, and negation--have been described by Brown and Bellugi (1964), Bellgui (1965), Brown (1968) and others. These reports are of great interest for the light they shed on strategies children may use in language learning. Few people, however, have the time, patience, or money--grants in child language are not that plentiful--to do observational research. Some investigators have also felt that a larger number of children must be studied before relevant conclusions for language teaching or for reading programs could be made. The trend recently has been towards smaller experimental studies on a particular structure or group of related structures.

Three types of experimental studies appear most frequently: production, comprehension, and imitation tests. The Berko study is a model for production experimentation. The child is shown a drawing and the experimenter says "This is a wug. Now there are two of them. There are two ____." The child (hopefully) replies with the plural form of the noun and his pronunciation of the plural form (/s/, /z/, or /ɨz) is recorded on a form. With the data from a large number of children it is then possible to say whether the young child has acquired the rules for a fairly wide variety of morphological endings.

In a comprehension experiment, a nonverbal behavioral response is expected for the sentence types being tested. For example, the child may be presented with toy animals and asked to "Show me The cow is kissing the calf" or "Show me The cow was kissed by the calf" or similar sentences. The child uses the toys to act out the sentences, thus giving evidence of comprehension of active vs. passive. In this way it is possible to find out whether the child understands a given structure before he is able to produce it accurately.

In imitation experiments, the child repeats test sentences. On occasion this can give interesting information about the child's language. Osser (1969), for example, gave young children sentences which contrasted verbs which do or do not take progressive endings (e.g., "Mama is cooking dinner" vs. "everyone is owning shoes"). Repetitions of the ungrammatical sentences were slower and many children substituted other verbs or changed the sentence entirely. Some children simply refused to repeat sentences which didn't sound right to them.

Of course, the findings from these child language experiments ought to be common knowledge to writers working on ESL materials. They ought to be taken into account in the sequencing of lessons for the bilingual child. Unfortunately, they are not. A careful distinction must also be made between structures which the child must comprehend, understand, and respond to versus those he must produce with 100 percent "mastery." And unfortunately, no materials are available at the moment that make this distinction between comprehension and production. What is the teacher to do then? One possibility is to note the areas where bilingual children seem to have the most difficulty and ask whether these are structures or concepts which the Anglo child of comparable age has mastered. And help is available through the studies that have been made, many of which are reported here.

The studies listed below are on fairly simple structures, since these occur in early ESL lessons. As a word of warning, none of the experimenters claimed that _no_ child was able to produce the forms cited, nor did they claim that the children who failed to produce the forms would _always_ fail to perform. The data, in each case, _do_ have to meet statistical significance levels. They cannot, therefore, be dismissed simply as "performance errors."

Inflections and Word Subclasses

Noun Inflections

Berko found that young children did not produce the /ɨz/ plural with much consistency. For example, the child might say _three horse_ instead of _three horses_.

As Susan Ervin-Tripp (1964) noted in her experiment with young children, the problem with the /ɨz/ ending appears in all its functions; possessive forms without an additional sibilant (_That's Sis book._) are common.

Verb Inflections

In the simple present, Berko showed that the /ɨz/ form is difficult for many young children (47 percent correct responses). Some children make an early /s/ vs. /z/ distinction with the /ɨz/ form as /Ø/ (_He flash the light on me_). Then once the /ɨz/ form begins to appear, it is tried out in all three categories (_He jumpses on my bed_. _He runses round and round that table_. _He dances by hisself_).

Contrary to expectation, children learn most irregular past forms first as lexical items. Later, when they have learned the regular past rule, they begin to regularize the previously learned irregular verbs or produce the two forms in variation (cf. Ervin-Tripp, 1964). This variation of forms persists well into the upper grades with children producing such forms as *He ran/ranned/runned/run around the block*. First and second grade data (cf. Menyuk, 1964) give numerous examples of this variation. Of the three regular past tense forms, many children have difficulty with the /ɨd/ form *He land on the roof*; *He make-tɨd magic* just as they did with the simple present /ɨz/ form.

Irregular participles are regularized by both elementary and secondary school children (cf. Turner and Rommetveit, 1968). It's not unusual to hear even teenagers using *rided*, *catched*, and *throwed* in their informal speech.

Noun Subclasses

The child generally assimilates mass nouns to the count noun category, saying *I want two chalks* and *How many gums you want*? Given a game where children asked each other *how much/many* questions as required by the two noun categories, kindergarten and 2nd grade children were neither able to ask or answer the questions with standard forms (Hatch, 1969). Questions like *How many lettuces*? *How much oranges*? and answers like *I want three bread*; *Gimme two banana*, may sound like examples of an ESL child's struggle with English; but they occur directly in this data from upper-middle-class Anglo children, "advantaged" second graders.

Pronouns

The object pronoun as subject is very common in the data for young children (Hatch, 1969), the most frequent "errors" occur in third person pronouns (*Them is the good guys*; *Her came in the door*). Kindergarten and 1st grade children also pay little attention to gender and number, readily referring to *momma* as he, and *Jimmy* and *Tom* as *she*. Smith (1969), noting that Spanish children learning English repeatedly used *he* in speaking of their mothers, writes that he was surprised on visiting a first grade class to find that native English-speaking children were doing the same thing.

Simple Transformations

Negation

Children have little difficulty with sentence negation but most children do not produce forms of constituent negation in the early grades (His shoes are *untied*; There are *no* marbles in the box) without double negation problems. Comprehension tasks usually show that all children (and adults) find negative statements to be more difficult than affirmative because of "truth judgment" problems.

Simple Questions

While there is no experimental data on frequency of questions without the auxiliary (*How many you want?*) or on doubly marked forms (*Did he went?*), examples do occur in the data. Bellugi-Klima (1965) discusses the stages of question formation of three children.

Passives

The passive is certainly the most researched topic in child language; all research shows that *be* passive is difficult for children. The *got* passive, however, has not been investigated and seems to be used almost exclusively by young children when they wish to use passive voice. The agent is seldom included (*The boy got hit*). As noted above, irregular participle forms are regularized by many children (*The ball got throwed over the fence*) and doubly marked forms (*That dog got caughted*) are common.

Other Transformations

Comparatives

Graeme Kennedy (1970) showed that "even in the relatively restricted area of quantitative comparisons, children have by no means mastered comprehension of the linguistic devices for comparatives by the time they enter school." The difficulty of comparatives depends partly on linguistic form, partly on negation, and partly on whether quantities are the same, greater, or less in quantity. Children up to the fifth grade level gave fewer correct responses to negative comparatives (*There aren't as many oranges as apples*) than to affirmative. Children gave fewer correct responses to minus quantities (*There are fewer pencils than pens*, *There is less ice cream than cake*; *The number of marbles is smaller than the number of balls*). Doubly marked comparatives (*He is more taller than you*) and alternate forms (*He can swim the same fast as I can*) are very common in the speech of young children.

Time Clauses

Time clauses that violate order of occurence also are difficult for kindergarten and 2nd grade children (Hatch, 1969). For example, given a sentence like *Move a red one before you move a yellow one*, the child will move first a red marker and then a yellow one. Given a second command like *Before you move a yellow one, move a red one*, the child will still move the markers in the order mentioned, first a yellow and then a red. Prior to 2nd grade, children showed no real comprehension of time connectives unless the order of mention was the same as the order of action required.

Relative Clauses

Slobin (1967) and others have remarked on the early appearance of comprehension of relative clauses by young children. His informant repeated simple subject focus relatives as conjoined sentences. (Given "Mozart who cried came to the party," she would repeat *Mozart cried and he came to the party*). Object focus relatives, however, were beyond her ability to repeat. Douglas Brown (1970) reported that object focus relative clauses were much more difficult than subject focus (*The boy that the girl is talking to is wearing a hat* vs. *The boy that is talking to the girl is wearing a hat*). Relative pronoun difficulty could also be ranked, showing that *who* and *who deletion* were much more difficult than *which* or *that*. Observational data shows *what* is frequently used as a relative pronoun (*The guy hit the boy what talked*) by young children.

Infinitive Clauses

Chomsky (1968) showed that children had problems with pronoun reference following contrasts in "A told/promised B to C" type constructions. Given directions like: *Mickey told/promised Bozo to jump/dance/run. Make him do it*, children up to the age of 9 were unable to give consistent responses. Luria and Kramer (1969) found that it was not until 12 years of age that children could handle the "minimum distance" problem. That is, children regarded the closest noun, *Bozo,* as the subject of the infinitive in *Mickey promised Bozo to dance.*

Conditionals

Kindergarten subjects give no consistent evidence of comprehension of conditionals like *if...then*, *if not...then*, *unless...then,* or *unless...then not*. Asked to look at a colored disk and to follow commands, the children could not make correct choices of whether or not to follow commands like: *if it's red, wiggle your fingers*; *if it isn't blue, raise your hand*; *jump up and down unless it's yellow*; *don't touch your shoes, unless it's black.* Second grade children could respond correctly to *if...then* commands, gave close to chance responses to *if not...then* and *unless...then not* and uniformly misinterpreted *unless...then* sentences (Hatch, 1969). Few children, however, misinterpret formulas like *Don't come to the table unless your hands are clean!*

Indirect Questions

Olds (1968) used a game situation in his study of connectives of various types. He found that children were unable to respond accurately to commands like *Tell/Ask your opponent how many places to move.* Chomsky (1968), also interested in testing embedded questions, used *ask/tell* as part of the stimulus sentence and found that none of the children (up to age 10) were able to perform the task exemplified by such sentences as *Tell/Ask Laura what to paint*. For the ask statement the child would *respond Laura, what do you wanta paint*? or even *Paint the box.*

The last finding explains why indirect drill cues such as *Bill, ask Maria how old she is* or *Ask Bill what color it is* so frequently provoke responses like *I'm eight* and *It's green* from ESL children rather than questions.

A wealth of information on *frequency* of structures is available from analysis of tapes of the Anglo child's language in a variety of natural situations. Loban (1964), O'Donnell (1967) and others have charted frequency of patterns. Sample percentages for children in third grade according to O'Donnell show 43 percent of all sentences as Subject-Verb; 44 percent Subject-Verb-Direct Object; 4 percent were sentences with be; 3 percent were there is/are sentences; zero percent indirect object sentences. Such information (complete data is available in the mentioned studies) should also be used in planning materials for young ESL learners. If the Anglo child produces a large number of Subject-Verb and Subject-Verb-Object sentences in his natural speech, it seems that we would want young ESL learners to thoroughly master these patterns. If the Anglo child seldom uses the indirect object, or there is/there are sentences, then perhaps less time should be spent in requiring the young child to completely master these less frequent forms.

No doubt teachers at this point are asking, "What am I to teach then? Isn't it important to teach pronouns? Don't my students have to learn /ɨz/ plurals? What a lot of nonsense !" I agree that these forms must be taught. But, as a teacher, you must decide for yourself what is meant by such generalized textbook objectives as "the child will master the basics of the English language." Does this mean "mastered" as much as the Anglo child of the same age has mastered each structure? If it does, then it seems reasonable that you will not stay at a dead halt struggling over the same material week after week when you know that the structure you are working on is one that all children --even the "advantaged" ones--have trouble with. Most teachers haven't the heart (or the patience) to insist on 100 percent mastery anyway but, if they do, then they should know they are facing a double battle in fighting developmental levels as well as the regular language learning battle.

Some alternatives can be considered. An obvious first step is to make sure that difficult structures, once introduced, are re-introduced periodically throughout the course. Many textbooks do assume that once an item is taught, it's taught; and that item never reappears again in the book. If cyclical review is not obvious, make sure you add as many re-introductions of the structure as you can throughout the year.

A second possibility is to make a distinction in terms of what kind of "mastery" you expect. Even when Anglo children say How many gums you want? they understand when someone says How much gum do you want? One hundred percent mastery in terms of comprehension of such structures can be demanded and some lesser standard set for production of the form by very young ESL learners. Teacher language versus child language is also a helpful dichotomy. Many teachers have made strong, and I believe wise, pleas for first introducing a new structure or new vocabulary item not by teaching the child to say it but by using it in her "teacher language" with him long before that time. After all, this is not so different than our old reliable saw of "listen, speak, read, write and in that order."

The final, and I hope the strongest, remedy to apply is to break from the paradigmatic mold. What is there that dictates all pronouns--first, second, third person, singular and plural, subject, object, and possessives--must be presented all at the same time? Research shows that when the number of contrasting items is that large, little learning can take place. Yet this is precisely what we try to do over and over again. What is there that says we have to teach all prepositions together--by, in, on, at, near, around, next to, in front of, in back of, behind, through, etc.? What is there that says we have to teach all comparatives together? What is there that says we must present all the variations of the conditional if-then/unless-then group when we know that native speakers in the elementary grades give little evidence of actually comprehending them?

Common sense (and research!) can tell us that children talk about I, me, and sometimes you. Work for mastery of those first. It tells us that children use affirmative comparisons (the big man, the great big man, the biggest) but not the negative qualities (less than, fewer than, the least). It tells us that young Anglo children use by as a cover preposition and that there is no immediate need for him to produce all the other related forms even though you may want him to comprehend all the forms in the preposition lessons. It tells us that children can handle conditionals if they are taught as yes/no questions (Is it green? Then cross the street.) or as when clauses (When it's green, cross the street.) so that conditionals can be taught gradually, leaving the more complex forms until these have been "mastered."

To follow this advice to the letter would, of course, mean scrapping most ESL materials and organizing our own sequence of lessons. While ESL teachers are known to be handy, creative, hard-working and all other good things, no one can do such a job alone. We have to rely on writers and materials development teams to do that. But every teacher, looking over a unit, can decide for herself which of the structures presented should be taught now for comprehension or for production, how many of the items in a paradigm of structures are crucial for communication at this age level, and what the level of mastery for these crucial items must be.

An honest reappraisal of the literature will make us realize that what the linguist means when he says that the child of five has mastered his language is quite different from what we as teachers mean when we expect our students to master a structure. This misunderstanding has led us to expect elementary school ESL learners to master structures even when there is no evidence that the Anglo child has mastered them. It is, therefore, important that more information on first language acquisition be made available to teachers and to writers of ESL materials so that developmental levels as well as contrastive analysis can be considered in sequencing materials. It also will give us a chance to re-evaluate our teaching and the child's progress more realistically so that we do not end up the year completely discouraged about the young ESL child's learning abilities and our own teaching.

REFERENCES

Anisfeld, M., & Tucker, J. R. The nature of English pluralization rules of kindergarten children. Unpublished manuscript, Cornell University, 1966.

Bellugi, Ursula, & Brown, R. W. (Eds.) The acquisition of language. Monograph Social Research in Child Development, 1964, 29, No. 1.

Berko, Jean. The child's learning of English morphology. Word, 1958, 14, 150-177.

Brown, H. D. English relativization and sentence comprehension in child language. Unpublished doctoral dissertation, University of California at Los Angeles, 1970.

Brown, R. W. The development of wh-questions in child speech. Journal of Verbal Learning and Verbal Behavior, 1968, 7, 279-290.

Brown, R. W., & Bellugi, Ursula. Three processes in the child's acquisition of syntax. Harvard Educational Review, 1964, 34, 133-151.

Brown, R. W., & Berko, Jean. Psycholinguistic research methods. In Mussen, P. H. (Ed.), Handbook of Research in Child Development. New York: John Wiley & Sons, 1960.

Chai, D. Communication of pronominal referents in ambiguous English sentences for children and adults. ERIC ED 012-889, 1967.

Chomsky, Carol S. The acquisition of syntax in children from 5 to 10. Unpublished doctoral dissertation, Harvard University, 1968.

Ervin, Susan M. Imitation and structural change in children's language. In Lennenberg, E. H. (Ed.), New Directions in the Study of Language. Cambridge, Massachusetts: MIT Press, 1964. Pp. 163-190.

Fraser, C., Bellugi, Ursula, & Brown, R. W. Control of grammar in imitation, comprehension, and production. Journal of Verbal Learning and Verbal Learning and Verbal Behavior, 1963, 2, 121-135.

Gaer, Eleanor. Children's understanding and production of sentences. Journal of Verbal Learning and Verbal Behavior, 1969, 8, 289-294.

Gregoire, A. L'Apprentissage du Langage. I. Les Deux Premières Années. II. La Troisième Année et Les Années Suivantes. Paris: Droz, 1947.

Hatch, Evelyn. Four experimental studies in the syntax of young children. Technical Report No. 11, March 1969, SWRL, Inglewood, California.

Hatch, Evelyn, Sheff, J., & Chastain, Diane T. The five year old's comprehension of expanded and transformed conjoined sentences. Technical Report No. 9, 1969, SWRL, Inglewood, California.

Kennedy, G. Children's comprehension of English sentences comparing quantities of discrete objects. Technical Report No. 22, 1970, Southwest Regional Laboratory, Inglewood, California.

Loban, W. Language ability: Grades seven, eight, and nine. USOE Project No. 1131, 1964.

Lovell, K., & Dixon, E. M. The growth of the control of grammar in imitation, comprehension and production. *Journal of Child Psychology and Psychiatry*, 1967, *8*, 31-39.

Luria, Zella, & Kramer, Pamela. The development of competence in an exceptional structure in children and young adults. Paper presented at the Society for Research in Child development, Santa Monica, California, 1969.

Menyuk, Paula. Alternation of rules in children's grammars. *Journal of Verbal Learning and Verbal Behavior*, 1964, *17*, 109-121.

Menyuk, Paula. *Sentences Children Use*. Cambridge, Massachusetts: MIT Press, 1969. Research Monograph 52.

O'Donnell, R. C., Griffin, W. J., & Norris, R. C. Syntax of kindergarten and elementary children: A transformational analysis. National Council of Teachers of English Report No. 8, 1967. Champaign, Illinois.

Olds, H. F. An experimental study of syntactical factors influencing children's comprehension of certain complex relationships. Report No. 4, 1968, Harvard University Research and Development Department.

Osser, H., & Dillon, P. The child's acquisition of the present progressive inflection. Paper presented at the Western Psychological Association, Vancouver, 1969.

Sinclair-de-Zwart, Hermina. Developmental psycholinguistics. In Elkind, D., & Flavell, J. (Eds.) *Studies in Cognitive Development*. New York: Oxford Press, 1969.

Slobin, D. I. Grammatical transformations and sentence comprehension in childhood and adulthood. Journal of Verbal Learning and Verbal Behavior, 1966, 5, 219-227.

Slobin, D. I., & Welsh, C. Elicited imitations as a research tool in developmental psycholinguistics. ERIC ED 012 892, 1967.

Smith, Gail M. "Some comments on the English of eight bilinguals," in A brief study of Spanish-English bilingualism." Final Report, Research Project ORR-Liberal Arts-15504, (Lance, D. M., Principal Investigator) Texas A & M University, College Station, Texas, 1969.

THREE BOOKS ON LANGUAGE ACQUISITION

by Evelyn Hatch

Carol Chomsky, THE ACQUISITION OF SYNTAX IN CHILDREN FROM 5 TO 10, MIT Press, 1969.
Paula Menyuk, SENTENCES CHILDREN USE, MIT Press, 1969.
Lois M. Bloom, LANGUAGE DEVELOPMENT: FORM AND FUNCTION IN EMERGING GRAMMARS, MIT Press, 1970.

These three books, all from MIT Press, exemplify three different approaches to the study of child language. Chomsky's ACQUISITION OF SYNTAX contains reports on four experimental studies. In each experiment the child's ability to comprehend a different syntactic structure was tested. SENTENCES CHILDREN USE is based on both observational and experimental data. Menyuk is not, however, interested in listing sentences that young children can or cannot produce. Rather, she describes in transformational grammar terms, the child's ability to form sentences from what she calls base structure rules and his growing ability to use a wide variety of transformations. Bloom's work, LANGUAGE DEVELOPMENT, is based on both linguistic and extralinguistic observational data. Aside from a description of the form of child language, she wants to know what the child means when he chooses to use various language forms. The additional behavioral and semantic information allows her to suggest reasons for the development of varying syntactic forms.

Summaries of the three books follow.

Carol Chomsky, THE ACQUISITION OF SYNTAX IN CHILDREN FROM 5 TO 10, MIT Press, 1969.

This study tests the child's comprehension of four syntactic structures. The children tested were forty children of middle socioeconomic class enrolled in kindergarten through fourth grades in an Eastern school. The structures tested involved pronoun reference and recognition of subject and object in complex sentences (with infinitives).

The four structures tested were:

1. John is easy to see, (Subject of sentence, object of see.)
2. John promised Bill to go. (Subject of go.)
3. John asked Bill what to do. (Subject of do.)
4. He knew that John would win the race. (Pronoun reference.)

In experiment one, the child was presented with a blindfolded doll and asked, "Is this doll easy to see or hard to see?" to test whether the child knew the correct subject of the sentence and object of see. If the child replied "easy," the investigator asked him to make it hard to see. The child usually responded by hiding the doll under the table. If the child replied, "hard," he was asked to make it easy to see. In this case, the child usually removed the blindfold from the doll.

In experiment two, the child was given figures of Donald Duck and Bozo and responded to test sentences like "Bozo tells Donald to hop up and down. Make him do it." vs. "Bozo promised Donald to turn a somersault. Make him do it." Comprehension of the subject in each case requires the child to use the appropriate figure in response to the command.

In experiment three, the investigator hoped to find out whether children could assign correct subjects to the following sentences:

1. Tell X what to feed the doll. (What he should feed the doll.)
2. Ask X what to feed the doll. (What you should feed the doll.)

In this experiment, two children were tested at a time. Unfortunately, when the experimenter gave the instruction "Ask Joe what to feed the doll," the first child immediately replied, "the tomato." It was obvious that the task was too difficult for all the children. Given simpler sentences such as "Ask Joe his last name," the child immediately responded with his own last name. The children did not mix up ask and tell, they simply interpreted both as tell.

Experiment four tested the child's comprehension of pronoun reference. Test sentences such as "Pluto thinks he knows everything. Who knows everything?" and "After he got the candy, Mickey left. Who got the candy? "Who left?" were used.

Findings showed considerable variation in the age of children who responded accurately in experiments one, two and three. The structures in one and two seemed to be comprehended between ages 5.6 and 9, and were known by all children over 9. Children did not give evidence of comprehension of the structure in three by age 10. The structure in four was responded to accurately at age 5.6.

Theoretical arguments and the derivations for each sentence type occupy the first part of the book. Sample data from some of the subjects is also included. While the title of the book includes the work acquisition, it should be noted that the experiments test comprehension of the structures; it is not concerned with whether or not the child can produce such sentences.

Paula Menyuk, SENTENCES CHILDREN USE, MIT Press, 1969.

Menyuk describes in five general hypotheses the procedures the young child follows in producing the large variety of sentences that he uses.

1. He acquires some rules to understand and reproduce sentences.
2. Using the rules of his grammar he samples the utterances and by some matching procedures he determines the structural description of the utterance.
3. Using the rules of his grammar he generates the utterance but sometimes does not complete the order of rules needed to generate the completely well-formed structure.
4. He stores the rules of his grammar but only has enough computing space or memory to store a subset of the rules of the grammar of his language.
5. The set of rules of his grammar is expanded when computing space increases (number of rules increases) and when computing space is recognized (additional restrictions, types of properties of lexical items, types of operations). (p. 155)

The data used to form these hypotheses is from a set of experiments with children age 2 to 7, both normal children and children using deviant speech. In none of the experiments was sex or IQ of the subject significantly correlated with the number or variety of structures used. That is, girls did not produce more or more varied structures than boys, nor did children with IQ's above the mean perform differently from those with IQ's below the mean. Age was the only significant variable.

All children formed sentences from basic phrase structure rules and showed evidence of acquired morphological rules. Variations were noted and described in three categories: 1) "Nonexpansion of symbol" (That is ommission such as "Mark a good boy."); 2) "Conflict with selectional restrictions and violation of strict subcategorization rules." (These are class or subclass substitutions, as in "*He's* a big train." "My daddy *takes* a shave every day." "*These* grass." "He took me *at* the circus."); and 3) "Overexpansion of a symbol" (redundancy, as in "She put on the dress *on*.")

While children did use well-formed base structure, some transformational rules were lacking. Others were produced in well-formed base structures part of the time and as more or less gross approximations to the rule at other times. Some of the more interesting examples were such sentences as "We've got to pasting." "She cooks and goes to shopping." "I like do it." "I want draw it." where verb constraints placed on the verb complement were not applied.

WH-questions frequently were incompletely formed. For example, the auxiliary was omitted ("How you take it out?"). Or the auxiliary was not inverted ("What you are writing?") or both the auxiliary and the verb were inverted ("Where could be the shopping place?"). Tense was occasionally duplicated ("What does this does?"), and double auxiliary occurred ("Is that's a belt?").

Comparisons are also made between normal three year old speech and that of a limited number of children with deviant speech. An example shows:

Normal-speaking 3.0	Deviant-speaking 3.0
Do you see it over there?	Which mine?
I want the fire engine to talk.	He's gots there.
He's going up the ladder.	I go wash hands.
There's a fire and here's the ladder.	My like gun.

Omissions account for the largest number of differences in the speech pattern of the two groups. Menyuk tentatively hypothesized that the problem lies in short-term memory capacity and/or the perceptual devices that the deviant-speaking child uses.

Throughout the book, the author points out areas where further research is needed. She also notes that a systematic comparison of the use of language by normal children and children whose language usage deviates from the norm might lead to "a better understanding of the correlations between language use and the psychological functions which underlie this use."

Lois M. Bloom, LANGUAGE DEVELOPMENT: FORM AND FUNCTION IN EMERGING GRAMMARS, MIT PRESS, 1970.

Of the three books reviewed, Bloom's study is the most concerned with how children develop and use language. The data on which she bases her arguments are observational. Superficially, the study is similar to that of the Brown group: 1) Data was obtained from three subjects (Kathryn, Gia and Eric). 2) Data was obtained in the home for approximately eight hours every six weeks beginning at nineteen months of age while the child played with toys, dressed, ate etc. 3) The data collected was divided into stages according to mean morpheme length of utterance. 4) The child's grammar at each stage was described.

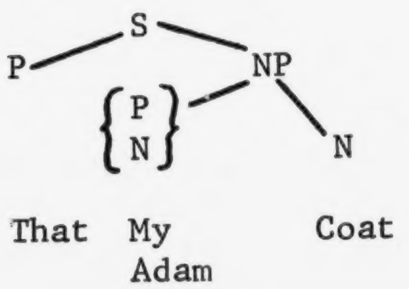
There are, however, important differences from previous studies in that nonlinguistic information from context and behavior were also recorded in detail in order to make semantic interpretation of utterances possible. This is an important difference because when information on semantic correlates is considered, it is possible to postulate underlying motivation for the development of syntactic forms.

While there were important similarities in the data of the three children observed, there were even more interesting differences in the strategies used in forming their earliest grammars. Eric's first utterances were describable in terms which Braine and others have called "pivot grammar." A small class of pivot words occurred with a large class of x words--x words give lexical content and pivot words functioned as syntactic operators (e.g., "no pocket," "here mommy," "this button," "more noise"). Relationships between constitutents could be described as linear and could be explained on the basis of the surface structure. Verb-object strings ("see rabbit," "make pee," "eating cereal") appeared first and were highly productive; subject-verb strings did not occur in Eric's speech until late and were only marginally productive ("man cry," "I get down."). This is contrary to Leopold's findings where his bilingual subject began with subject-verb, then subject-object, and finally verb-object.

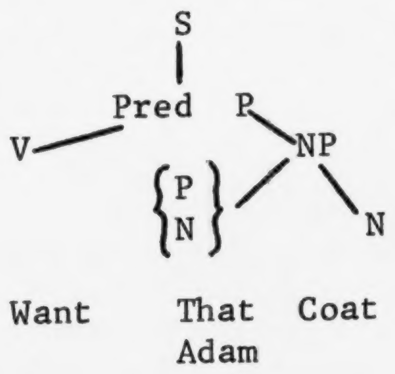
The data for Kathryn and Gia could not be explained by pivot grammar. Hierarchal relationships were obviously necessary. While subject-verb-object strings were not produced during stages I to III, they were postulated as the underlying structure to account for different semantic interpretations of two-word utterances. This was done by a reduction transformation.

The use of a reduction transformation process in language acquisition is in direct contrast to the usual notion that increasing structural complexity is made possible by adding structure to structure. For example, when the child has the rules:

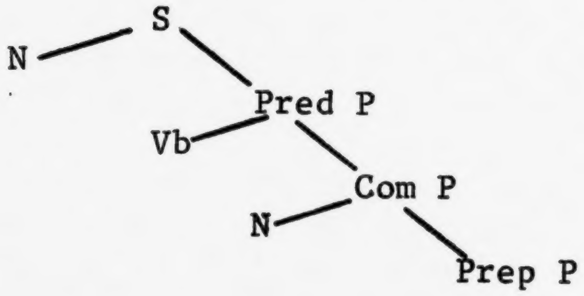
(a)



(b)



McNeill claims that "all the child lacks is simultaneous application of both rules" in order to generate a single sentence. Bloom, on the other hand, postulates that the child has a rule:



The nodes, of course, are not all filled in by the child at this early stage because of sentence length constraints. When the subject is expressed, either the verb, the object, the adverbial phrase or more than one of these is not expressed. A series of reductions account for sentences produced like:

Kathryn under bridge.	(N-Ø-Ø-Prep P)
Kathryn make under bridge.	(N-V-Ø-Prep P)
Make more under bridge.	(Ø-Vb-N-Prep P)
Make car under bridge.	(Ø-Vb-N-Prep P)

Using the extralinguistic information about the context and the behavior of the child at the time of the utterance allows Bloom to account for such a sentence as "Kathryn under bridge," when Kathryn is not under the bridge but rather putting a toy underneath the bridge. The record might look something like:

Description	Kathryn's utterance
(E pushed the train under the bridge; E picked up the truck.)	
Let's make the truck--	no make a truck.
No make a truck?	a bridge.
(E pushing train under)	under bridge.
Who's going to go under the bridge? I know who's going under the bridge. (K holding lamb)	this under bridge.
What is this?	lamb.
Let's make him go under the bridge. (K taking lamb to bridge)	Kathryn under bridge.

The behavioral description gives us the meaning of the sentence "Kathryn under bridge," and the sentence rules and reduction transformation gives us the form of the utterance.

The semantic and syntactic development of negation by the three children is also discussed in depth. The semantic categories discussed are *denial*, *rejection* and *nonexistence*. On the basis of frequency of occurence and progressive development, the order of acquisition was the same for all three children: nonexistence, rejection and denial. This agrees with the McNeill and McNeill study on negation, except that their Japanese subject also constrasted correctness of statements at first as well as nonexistence of objects and events.

The syntactic forms of negation are similar to those found in Phase A and B in the Brown study (Bellugi-Klima, 1967). Differences in forms used by each of the three children in the three phases is described in depth. While markers varied from child to child over the three phases, all three used "not" to signal denial; "don't" to signal rejection, and wider variety of markers (can't, don't, not, no) for nonexistence.

The final chapter of this book is a summary discussion of language acquisition, strategies for learning language, methodology in the study of language acquisition, and inadequacy of pivot grammars as first grammars. A model for language development is postulated which specifies "at least three interrelated components: linguistic experience, nonlinguistic experience, and cognitive perceptual organization." Overlap of the three would represent what the child knows about language.

While many transformational grammarians have made strong claims for the child's learning of language in the fourth year, Bloom is in the growing group of investigators who believe that such "learning" continues well into the school years. Her model tries to explain how this comes about. She sees the study of the child's use of linguistic structures as the most promising field for linguistic research. "*Using* the structure and *knowing* the structure can be two different aspects of language competence"; both should be proper areas for linguistic inquiry.

INFORMATION EXCHANGE: Reports and Reviews

A. Bilingualism

B. Contrastive Analysis

C. Indian Languages

BIA PROJECTS

ESL HELP FOR TEACHERS IN THE NAVAJO AREA

Helping the New Teachers

Approximately two hundred new teachers were hired in the fall of 1969 to serve in BIA schools in the Navajo Area. Some were novices to the profession, recently graduated from a college or university; some had years of experience. But few were familiar with the specific needs and problems of Navajo pupils. To any newcomer to Navajoland, the vastness and isolation of the area, the contact with a very different language and culture are startling enough. But the elementary teachers assigned to a self-contained classroom and the language arts people of departmentalized upper levels were also told that they were expected to teach "ESL." Their first reaction was predictable: "What is it?"

The most generally used ESL text in BIA schools is the Fries-Rojas American English Series. Teachers who have no background and training find the texts different from conventional (non-ESL) materials and are obliged to rely on help from experienced teachers and supervisors.

There are veteran teachers who have been trained in ESL and have developed their own effective, coherent lessons for each step of the sequency. They have collected techniques, games and visual aids for each presentation. Also, some specialists and supervisors have had special instruction in lesson planning and observation and are well-informed in the theoretical backgrounds of linguistics, psychology, testing, etc. These people take the novices in hand and help them with demonstrations, and provide time to observe the experienced teacher across the hall, to view a film, etc. Each agency has assumed the responsibility for training its own novice teachers in ESL at the grass roots level.

In addition, an outside consultant, Dr. Gina P. Harvey of the University of New Mexico, is spending one or more days of each week in the schools, observing, demonstrating, offering encouragement, help, and advice. Her assignment began November 1969. So far she has been able to work with new teachers at seventeen schools. In each location she usually gives a demonstration and discusses how to interpret the text, and how to write a lesson plan, from behaviorally stated objectives to testing. A very important session is devoted to explaining the scope and sequence of the ESL program and clarifying its relevance to the special needs of Navajo children. There is always a question and answer period. Next year several of the 1969 novices will be teaching ESL for the second time around and sharing the results of their training and experience with the recruits of 1970.

Helping Teachers At The Upper Elementary And High School Level

Teachers of foreign and second languages (including English) have now available a fairly wide choice of materials geared to students of different ages and backgrounds. Most of the materials, however, do not go beyond an elementary level of proficiency. Even if they do, they often seem to become less organized, less interesting, and generally less effective at the intermediate and advanced level. Similarly, most teacher training programs, in-service or otherwise, with their emphasis on oral practice and pattern drill, have been relevant to teachers of beginning students, leaving others to their own devices. After all, the elementary level constituted the necessary foundation for developing the subsequent levels. But while the theoretical focus rests on the beginning student, teachers in classrooms everywhere have to go on teaching beyond elementary patterns. They have to cope with the needs of learners who can function in the target language but haven't reached native-like fluency.

An interesting example of the situation outlined above and how it can be handled in BIA Schools is found on the Navajo Reservation, where ESL is being taught with some success at the lower elementary levels (including some remarkable experimental projects). But there are many students in the upper elementary grades and the high schools, those who were in the lower grades before the ESL programs became established Area-wide, who have mastered enough English for every day communication but not for some academic tasks. These students also need specialized and systematic help.

Dr. W. J. Benham, who is in charge of the educational program for the Navajo Area, has turned his attention to the needs of teachers of upper levels by making available to them up-to-date professional information and whatever materials can be found. These teachers, often highly motivated and willing to learn, have been reluctant to spend time and effort on the usual ESL training which was not relevant to their students.

First of all, last summer (June, 1969), a workshop was organized at Brigham City, Utah, for the purpose of examining all commercially available materials for teaching ESL at the intermediate and secondary levels and of acquainting teachers with materials suitable as supplements.

Many other relevant materials (remedial reading programs, readers, controlled composition texts, spelling programs and outstanding language arts texts not designed specifically for ESL) were also examined by the committee for the purpose of disseminating the information to interested schools.

The results of the summer workshop, plus TESOL pedagogy adapted for intermediate and secondary students, are being made available to interested BIA teachers in a series of courses conducted on the Reservation by Dr. G. P. Harvey. The project is funded under Title I, 89-10, and participating teachers receive credit from the University of New Mexico. Classes met once a week for seven weeks in each of the five Navajo Agencies; teachers come from a fifty-mile radius. Outside consultants have also invited to lecture to the teachers.

The program stresses the creative aspect of language and is concerned with reading and writing as well as with oral work.

Dr. Gina P. Harvey
Farmington,
New Mexico

NAVAJO KINDERGARTEN

Bilingual-bicultural first grade classrooms have been instituted in four BIA schools in the Navajo Area for 1970-1971. These classes are an extension of the bilingual-bicultural kindergarten program introduced in the same schools in 1969. (See Spring, 1970 EFAI issue.)

This BIA bilingual program was planned under the direction of Thomas R. Hopkins, BIA Chief of Curriculum Development and Review and is now being supervised by Faralee Spell, Area Chief of Curriculum and Instruction, and Mary Ross, Education Specialist, of the Area Division of Education. The development of instructional materials has been contracted to Dr. Muriel Saville of the University of Texas of Austin.

The Navajo language is used exclusively at the beginning of the kindergarten year, with English added as a second language. While a steadily increasing portion of the school program is conducted in English at the first grade level, initial reading and writing skills are taught only in Navajo. The Navajo language continues to be used as a medium for furthering the development of concepts relating to the students' environment and in creative linguistic and aesthetic expression. English is used for mathematics and for some of the science instruction. English competence is to be developed during the first grade year to a level of reading readiness in that language.

All of the kindergarten and first grade teachers and aides in bilingual classrooms are native speakers of Navajo. In-service training has emphasized reading and writing the Navajo language and included methods for teaching reading, mathematics, and English as a second language. In addition to the regular staff, William Morgan and Beatrice Estrada have contributed heavily to the training program.

Bilingual guidelines and materials for the kindergarten have been revised and will soon be available to interested schools and individuals. First grade materials will be completed and tested by the summer of 1971.

Muriel Saville, University of Texas

THE DEMONSTRATION SCHOOL AT ROUGH ROCK

One of the first and most influential of the experimental programs on the Navajo is the Demonstration School at Rough Rock, Arizona. It is still considered to be one of the most innovative bilingual programs in operation. Since its beginning in September, 1966, when it was opened with six grades and a pre-school class, it has increased to nine grades and has a population of over four hundred children who come from the area immediately around Rough Rock.

While ESL is an important element of the program, there has been increasing emphasis on the use of oral Navajo for the younger children. Navajo has now become the main language of instruction for grades K through two (Phase I). They receive four hours of spoken and written Navajo and two hours of spoken English. Grades three through nine (Phase II) are given two hours of spoken and written Navajo and four hours of spoken and written English.

A significant innovation in this school is the seven-man all-Navajo school board in which is vested the decision-making authority for the school program and for its policy. This involvement of the community is extended to the dormitories, where teams of parents "live in" for several days, so that sometime during the year, every child has a close relative visiting the dorms. Also the elders and artisans of the community are invited to participate in the continuing program of Navajo culture and history by contributing lessons in their skills, such as weaving or storytelling.

In the fall of 1969, a major evaluation was begun by Dr. Luis Bernadoni from the University of New Mexico. Control schools will be used, and measurements will be made of such things as achievement in both English and Navajo, attitudes toward Navajos, acculturation, changes in occupational values and choices, self-concept, and attitudes toward the school.

Resource people from many universities across the country have been called upon as consultants. The project is supported by funds from the BIA, OEO, and HEW.
(Abstracted from The Center Forum, Center for Urban Education, Vol. 4, No. 1, p. 20, September, 1969)

DINE BIOLTA ASSOCIATION TEACHER TRAINING WORKSHOP

For the first time in the history of Navajo education a teacher training workshop is being conducted on the Navajo Reservation with a Navajo director and Navajo instructors. All participants are Navajo teachers or teacher assistants who will be teaching Navajo youngsters in the school year 1970-1971.

The participants are engaged in the preparation of curriculum materials in the areas of Navajo music, culture, linguistics, arts and crafts and language arts for the primary age children. These materials are written in Navajo script, as well as in English.

The instructors and Navajo consultants have been using the Navajo language as the medium of instruction and discussion. This experience alone, has created a personal sense of ego security and identity as well as a reinforcement and enrichment of one's culture.

Non-English speaking consultants have been working with the instructors and participants in discussion and demonstration of special aspects of Navajo culture.

University professors who have worked with Navajo people were invited to discuss theories regarding linguistics, thinking, teacher training, curriculum development, bilingual education, identity, music and cross-cultural relations.

Mrs. Anita Bradley Pfeiffer
Director

Editor's note: The Dine Biolta (Navajo Education) Association Teacher Training Workshop was held at Hunters Point Boarding School, St. Michaels, Arizona, June 15 to July 25, 1970. It was the beginning of a three-year Curriculum Development Project for Training Navajo Teachers in Navajo Culture and Linguistics. It consisted of five instructors and forty teachers from BIA, public, and Navajo schools who will continue to share information and evaluation during the school year.

ESKIMO-ENGLISH BILINGUAL PROGRAM, BETHEL AGENCY, ALASKA

Many Alaskan natives have wondered over the years why their language was not available to them in the school. Fortunately, starting this September in three villages, a bilingual Eskimo-English program became a reality. The program had its genesis from a number of individuals and groups but suffice it to say at this point, the Eskimo people of the three villages are excited about the program.

The Yuk dialect of the Kuskokwim and Yukon River regions is the language being used. The Alaska Rural School Project of the Department of Education and the Linguistics Department of the University of Alaska conducted the teacher and teacher aide training programs this summer. It was during this workshop that the formal aspects of the Eskimo language were taught and curriculum materials were prepared. Irene Reed of the Linguistics Department of the University of Alaska, who has been studying the dialect for ten years, performed yeoman service in helping with the technical aspects of the two-language curriculum. Pedagogical content has been handled by the University and by the Juneau Area Education staff of the BIA. The program is being funded under the auspices of Title I of the ESEA legislation.

One pleasing part of the Alaska program, and all other bilingual projects that the BIA has helped with in recent years, is the bringing together of the educationists and the linguistists in common purpose, to improve the quality of education for Indian and Alaskan Native children. Additionally a profound revelation to the Indian and Eskimo peoples has been associated with the silent message carried in a bilingual program. One no longer has to preach the value of native languages in these villages; the bilingual program is a loud and positive example which accords dignity and worth to the Eskimo language.

BIA CURRICULUM BULLETIN NO. 4:

English for American Indians

The recently issued Curriculum Bulletin No. 4 of the BIA is a compilation of selected articles from the first three issues of English for American Indians: A Newsletter of the Office of Education Programs (The three issues were prepared by the Center for Applied Linguistics and edited by Sirarpi Ohannessian). Through this single-volume collection, the material will receive wider circulation and will be more readily available to the new classroom teacher and those in charge of in-service workshops.

The articles included are: "Language Drill and Young Children," by Muriel Saville; "Beginning School in a Second Language," by Lois McIntosh; and "Breaking Down Your Writing Goals," by Gerald Dykstra. Each article is followed by a bibliography compiled by Carol J. Kreidler.

Copies are available on request from the Office of Education Programs, BIA, Washington, D. C.

BILINGUAL PROJECTS UNDER TITLE VII

Title VII of the Elementary and Secondary Education Act of 1965, known as the "Bilingual Education Act," was enacted January 2, 1968. Its purpose is defined as follows:

> [to] provide financial assistance to local educational agencies to develop and carry out new and imaginative elementary and secondary school programs designed to meet the special educational needs... [of] children who come from environments where the dominant language is other than English. (Sec. 702)

It is the intent of the Bilingual Program Branch of the U.S. Office of Education, which works closely with local administrators, that the projects should be "truly bilingual" in the sense that the child's dominant language will be used as the medium of instruction until he has acquired enough ESL structures and vocabulary to begin learning in English.

Among the first seventy proposals accepted under Title VII, only three were for projects concerned with American Indians. These were for Cherokee at Tahlequah, Oklahoma; American Indian and Spanish at Grants, New Mexico; and Navajo at Blanding, Utah. Other grants have since been made for the year 1970-71. The following reports are on both new and continuing projects.

SAN JUAN SCHOOL DISTRICT, BLANDING, UTAH

This program for Navajo children was piloted last year in pre-school and first grade at three schools in the San Juan School District in which the Indian students comprised 65 to 95 percent of the school population. Teacher training, under the supervision of Mr. Lynn Lee, Coordinator of Indian Education, consisted of a summer workshop conducted by consultants from Brigham Young University and emphasized the planning and conducting of lessons by two cooperating teachers in the same classroom, each teaching in a separate language. Further, workshops were held during the year for evaluation and for sharing of teacher-developed materials.

Some of their main objectives as outlined in a Bilingual Handbook, compiled by Dr. Ruel Allred of B.Y.U. may be stated briefly as:

1) Content mastery of subject matter areas to be undertaken in the native language of the child according to the regular public school time sequence.

2) The non-target population should behave in a manner supportive to the improvement of the target individuals' self-concept.

3) Parents of the target population to be helped to understand, support, and modify the curriculum.

4) Curriculum development should, among other things, develop learning activities related to the "real world" and the native language of the target population.

The project has made use of materials already available such as the Oral Language Program of the Southwestern Cooperative Educational Laboratory in Albuquerque for ESL. Other materials were adapted for the bilingual student by preparing tapes in Navajo to accompany commercial filmstrips, such as "Indian Ceremonies, Care of Teeth," etc. Other tapes such as "Coyote Stories," have been made to accompany teacher-made posters; and tapes made for small group participation and self-instruction games have been successfully used. They have also had access to materials sponsored by the Navajo Office of Economic Opportunity.

An evaluation and progress report is being prepared by Dr. Milford Cottrell of B.Y.U., and will be ready this fall.

SCHOOL DISTRICT 17-H, HARDIN, MONTANA

The Montana grant is for a project on three reservations, Crow, Rocky Boy, and Northern Cheyenne. The major pilot program will be at the Crow Agency this year, with a one-class program at Rocky Boy, and with the Cheyenne phase in the organizational stage. A report by Director John Dracon of a recent survey indicates that Crow is the dominant language of 82 percent of the children at the Crow Agency; Cheyenne is the dominant language of 55 percent of the Northern Cheyenne; and the Rocky Boy people wish to promote and revive the Cree language and cultural aspects of the program. The schools are all public schools with the exception of one B.I.A. school on the Northern Cheyenne.

The pilot project at the Crow Agency will be composed of all three first-grade classrooms and one classroom of the most able Head Start five-year-olds. There will be in each class native Crow speakers, non-Crow speaking Indians, and non-Indian children. Each classroom will have a Montana state certified elementary teacher and a Crow Indian aide who is competent in Crow language and culture. Their training will be done in summer and in-service workshops, including one on the Crow language which will be supervised by the most able Crow speakers as identified by the Crow Tribe themselves.

Instruction in many academic areas will be done in a situation where the child can explore a wide range of ideas and interests, and the language used will be in "direct response to the language initiated by the child." Most instruction will be in the dominant language of the child, but bilingual-bicultural situations will encourage development in the non-dominant language. While a Crow orthography is being developed by Ray Gordon, of the Summer Institute of Linguistics, and Dale Old Horn, of the Crow Tribe, emphasis for the first year will necesessarily be on oral competency. (See SIL report, this issue.)

The first objective is an assessment of the proficiency or deficiency in both the dominant and non-dominant language through language performance studies. Grouping for instruction will be based upon this language assessment. A second objective is the cooperation of the parents in planning and carrying out of the program. A first step in this direction is the compilation of a list of curriculum needs as seen by the parents. Not yet ready for publication, since only a small number of Crow people have been contacted to find what they would like their children to learn, the tentative list will be used as a basis for getting the opinion of many more of the Crow people before the final list is made.

Objectives focused on the growth of the child will give attention to: 1) contributions the child can make--vocal, artistic, social, etc., 2) social adaptation to child-child and adult-child relationships in which they will learn a balance between group discipline and free expression, 3) development of learning strategies and cognitive processes in either of the languages and cultures.

"Curriculum development, method, and materials will be in the hands of the teachers working with the parents and the Indian community." (from "A Program for Bilingual-Bicultural Indian Education in Montana," by Stephen and Rose Chesarek, Elnora A. Old Coyote, Joy Toineeta, and Dale Old Horn.)

ADAIR AND MCCURTAIN COUNTIES OKLAHOMA

Funded for 1969-70, a project sponsored by Adair County and Northeastern State College at Tahlequah was directed by Mr. Neil Morton at NSC. There were four pilot schools, each having a high percentage of Cherokee children, all of whom were substandard in Cherokee usage as well as in English. Some have no English. Each classroom had a bilingual aide for the teacher. Training for the teachers and aides was under the direction of NSC and consisted of 1) counseling for local teachers, 2) special techniques for working with Cherokee children culturally and linguistically, and 3) Cherokee language offered for credit to prospective teachers. There was a special coordinator to work with the parents to interest them and explain the program. Materials consisted of laboratory work with both languages, McGraw-Hill's Let's Speak English, and other materials which are being developed to apply to special problems of Cherokee children. Three encouraging results after the first year were increased attendance, lower dropout rate, and parents demonstrating an active interest and cooperation.

Funded for 1970-71, a project sponsored for Choctaw children is being sponsored by McCurtain County and Southeastern State College at Durant. In both objectives and implementation it is similar to the Cherokee program. Both programs hope for a five-year funding period, and both colleges have promised to continue to train teachers for as long as is necessary. It is hoped that local Choctaws may be encouraged to become teachers by changing the approach to educational programs in college.

The objectives of both programs are: 1) immediate help to children, 2) long-range help to all Indian children in Oklahoma, and 3) keeping the children in school "so that they may realize their full potentialities as citizens of our state and nation." (from Mrs. Patricia Hammon, Curriculum Specialist for Foreign Languages, Oklahoma State Department of Education.)

PROJECT SUN, CORTEZ, COLORADO

The Southwest Board of Cooperative Services, Dr. Robert Werner, Director, chose for their project the six elementary schools which had particularly high enrollments of Ute Mountain Ute, Navajo, and Spanish-American kindergarten children. The classrooms have varying combinations of the four ethnic groups (including Anglos), but all represent a multi-cultural, multi-lingual combination of rural disadvantaged and advantaged children.

A survey conducted May 15, 1970, to obtain teacher estimates of Ute, Spanish, and Navajo competence in English at kindergarten level and overall school performance indicated, as might be expected, that the Anglo child is considerably more competent upon entrance, and that performance of the others becomes consistently poorer as they advance through school. Part of the objectives of the project is to obtain valid baseline data and determine basic competencies in the languages concerned.

Their first year objectives are to develop speaking and listening skills in English and the vernaculars and writing skills in English. (John Green, SIL linguist, is translating English into Ute for the purposes of developing a reading primer.)

Their first year objectives will vary somewhat according to the dominant language of the student. However, they are broadly defined as follows: 1) to speak and write the standard variant of English at grade level in addition to maintaining their native languages; 2) to perform at grade level in content areas; and 3) to have monolingual speakers of English voluntarily learn enough Spanish to communicate in every day situations.

The objectives are expected to be achieved by: 1) bilingual and ESL language instruction, 2) material modification and development, 3) staff development and training, and 4) community participation. (taken from an "Abstract," provided by Noe E. Coto, Supervisor and Coordinator, Title VII Project Sun.)

DISTRICT I, STATE OPERATED SCHOOLS
ANCHORAGE, ALASKA

The target group in this project is Eskimo children of southwestern Alaska whose native language is Yuk. Early instruction will be in Eskimo (Yuk), with English being taught as a second language. All subjects will be taught in both languages, and it is expected that the children will become literate in both.

The project, planned for 179 kindergarten and first grade children, will begin in one pilot classroom and will be expanded as planning and teacher and aide training are completed.

First year objectives include "oral competence in both languages, some literacy,..." and frequent participation and support by parents as resource people in historical background, legends, etc.

(Abstracted from information supplied by Margaret Moore, BEPB, U.S. Office of Education.)

The addendum information for the Title VII articles was requested and supplied by the U. S. Office of Education.

ADDENDUM FOR SECTION ON BILINGUAL PROJECTS UNDER TITLE VII

Page 31, paragraph 2, line 5:

> be used as the medium of instruction while he is acquiring the language skills in English, after which both languages will be used as media of instruction. In addition, the child will be instructed in the language skills of his dominant language as well as those of English.

Paragraph 3:

> Among the first 76 proposals accepted under Title VII, five were for projects concerned with American Indians. Nine projects, of the 131 projects currently funded, involve one or more American Indian or Eskimo groups, and instruction is taking place in seven Indian languages and in Yuk, an Eskimo language. Where writing systems do not presently exist, they are being developed, and curricula employing the Indian and Eskimo languages are being prepared to further the education of the children in the history, culture, and heritage of the Indian and Eskimo peoples and in other areas where appropriate.

Page 34, title and line 1:

> Adair County should be changed to Cherokee County.

Page 36:

> According to information just recieved, the Alaska project is serving 50 kindergarten children only.

A HANDBOOK ON BILINGUAL EDUCATION

by Muriel Saville and Rudolph C. Troike

Although much basic research must yet be done in the fields related to bilingual education--linguistics, psychology, child language acquisition, etc.--those involved in designing bilingual situations are faced with the immediate necessity of setting up new programs, making use of whatever information is currently available. This document, therefore, was commissioned by the Center for Applied Linguistics to answer some of the questions of educators who are becoming involved in bilingual programs for the first time. The authors give warning that with further experience and investigation, answers may change; and they express the hope that educators will be ready to adapt their content and methods as new findings become available.

Despite the disclaimers, the authors have made a significant contribution to bilingual education. The handbook carefully examines, defines, describes, and gives answers to many of the perplexing aspects of preparing a good bilingual program. The areas considered were chosen because of their "immediate relevance to teaching." There are six chapters in the handbook, each of which is summarized below:

Chapter One begins with a statement of the problem. Past methods of teaching English have proved ineffective for the child who comes to school speaking another language, and he may never catch up with those who speak English natively. Terms are defined; and some fundamental considerations are pointed out for starting a program such as: What is language? How does a child learn his native language? What are some of the possible repercussions from being bilingual?

Chapter Two discusses the rationale in terms of linguistic factors, psychological factors, and social and cultural factors.

Chapter Three offers aids in program design. The chapter includes the beginning phases such as details of planning a bilingual program are discussed, placing responsibility for the initiation of a program, and description of several different kinds of programs from which to choose.

Chapter Four considers the language of instruction. From the presentation of a system of phonological notation through an explanation of grammatical systems and lexicon, this chapter uses Navajo and Spanish to point up the importance of contrastive linguistics.

Chapter Five includes pedagogical considerations. Items such as procedures in the teacher-child relationship, content of the curriculum, methods of language teaching, and practical teaching suggestions (with examples) in phonology, syntax, and lexicon make this an important chapter to the teacher or administrator who is involved for the first time in bilingual education.

Chapter Six stresses evaluation. The importance of pre-testing as well as post-testing in both languages, items for adaptation of standard tests, and how to test without standardized tests are discussed. A sample questionnaire for testing home conditions, problems of I.Q. testing, are included with hints on testing procedures.

(Copies are available from ERIC Reproduction Service. For instructions on ordering, see this newsletter, Spring 1970.

BILINGUAL EDUCATION: A Special Report from CAL/ERIC

The May 1970, issue of Elementary English, published by the National Council of Teachers of English, contains a special report on the documents on bilingualism and bilingual education which were processed by ERIC between January 1966 and December 1969. (See ERIC report in this newsletter, Spring, 1970.)

A. Hood Roberts, who is Director of the ERIC Clearing House for Linguistics at the Center for Applied Linguistics, and Mrs. Anna Maria Malkoc, a subject matter specialist at the CAL, have compiled a list of what they consider to be the most representative of these documents to acquaint researchers, teachers and administrators with the most significant materials now available in bilingual education.

Their report contains a list of some forty-four items, most of them carefully and generously annotated, on the following topics:

1) General bilingual education
2) Mexican-Americans
3) American Indians
4) Other ethnic groups
5) Tests
6) Bibliographies and references

Included is an invitation for teachers to submit copies of their materials to the Clearinghouse for possible inclusion in the ERIC system. Such materials should be addressed to the ERIC Clearinghouse for Linguistics, Center for Applied Linguistics, 1717 Massachusetts Avenue, N. W., Washington, D. C. 20036.

DESCRIPTION AND MEASUREMENT OF BILINGUALISM
DESCRIPTION ET MESURE DU BILINGUISME

edited by L. G. Kelly

This volume is essentially a report of an international seminar on bilingualism, which was held in June 1967, at the University of Moncton in Canada, sponsored jointly by that University and the Canadian National Commission for UNESCO. Invited were linguists, psychologists, and sociologists from many countries, including, in addition to United States and Canadian scholors, distinguished researchers from Belguim, Japan, France, Wales, Switzerland, India, Germany, England, Eire, South Africa, the Netherlands, Finland, USSR, and Australia. Each of the six chapters represents a session of the seminar, with papers, commentaries, discussion, chairman's summary, and selected bibliography. Some of the material, as the title suggests, is given in both French and English versions. The volume concludes with a set of resolutions and a summary statement by W. F. Mackey.

Those who read the material in this report will find in it a welcome reminder that bilingualism is not a local but an international concern, and that we would do well to take advantage of the experience of others often much more extensive than our own, in planning new bilingual programs.

A TYPOLOGY OF BILINGUAL EDUCATION

by William F. Mackey

This paper, which was prepared for a Research Conference on Bilingual Education held in June of 1969 under the auspices of the Bureau of Research of the United States Office of Education, has recently been printed in Volume Two of *Bilingual Schooling in the United States* (a new publication reviewed briefly in the present issue of the *Newsletter*). In the paper, Professor Mackey, who is Director of the International Center for Research on Bilingualism in Quebec, attempts to classify possible types of programs which might conceivably be considered under the heading of bilingual schooling. Since the term "bilingual school" has so many different meanings, such a classification--or typology--is essential, Mackey feels, if we are to engage in meaningful planning and measurement of bilingual education.

Mackey's classification is based on objective criteria, all of which are "observable and quantifiable," and all of which must be taken into account by those doing research on bilingualism. Basically, these criteria are concerned with patterns of distribution of the languages as they are used in the following contexts:

1. In the home.
2. In the school.
3. In the local area and in the wider community of which it is a part.

The status of the languages is also taken into account.

One of Mackey's chief concerns is the identification of curriculum patterns which specify in detail the role of the two languages in the school and their relation to the dominant language of the home. There are broadly two types of curricula: single-medium and dual medium. In single-medium schools, only one language is used "to transmit knowledge," although the other may be taught as a subject, much as French, let us say, is taught in high school in Los Angeles.

In dual-medium schools, both languages are used as media of instruction, but the pattern of distribution varies widely. Some of the general patterns might be summarized as follows:

1. The school begins with instruction in the dominant home language and gradually or abruptly transfers to a second language, often a language of wider communication. (For example, the child begins school in Navajo, and then at some point shifts completely to English, his second language.)
2. The school may maintain both languages for different subjects. (For example, mathematics would be taught in English, social studies in Navajo.)
3. The school may teach all subjects in both languages--"equal maintenance." (The American School in Guadalajara, Mexico, is so planned, where the children study the complete curriculum in both English and Spanish, spending half a school day in one language, half in the other.)

In his discussion to this point, Mackey makes extensive use of the following terms, some of which may be new to our readers:

1. Single-medium and dual-medium schools. These were defined above.
2. Language transfer (shifting from one language to the other) may be accultural (toward the new language) or irrendental (toward the dominant home language.) Language maintenance may be differential (with different subjects taught in the two languages) or equal (with all subjects taught in both languages.)

In the next section of the paper, Mackey considers the contexts (local and national) in which the languages being taught are actually used. Such considerations are vital, as Mackey points out, "since it is on the assumption of usage and consequent knowledge that the teaching is based." In examining language usage of the nation, the area, and the school, Mackey is able to define nine different contexts.

The fourth section of the paper is concerned with the languages themselves, for, as Mackey points out, this is "the component common to all types of bilingual programs at all levels." Here are examined the various functions of the languages in the home, the school, and the community. This section also considers the international status of the languages involved, whether they are languages of wider communication (as English, Spanish, or French) or local languages (as Navajo). Another question of considerable importance for planners of bilingual programs is treated briefly--that of dialect variation within the languages used. Already questions of dialect differences in Spanish have been raised in many of our new bilingual programs involving that language. And Dr. Muriel Saville has been increasingly aware of and interested in dialect variation in Navajo, a matter of some importance in preparing literacy materials for kindergarten children and first graders. Finally, Mackey considers the question of similarity and difference--"distance"--between the languages taught in school. This "distance" is a significant matter in planning the rate at which some materials are introduced. Language similarity (as between Spanish and Portuguese) may make the transition from one language to another much easier--at least at the level of understanding. On the other hand, mistakes in speaking and writing may in certain cases be increased because of the closeness of the two languages. Also important (surely of great concern in working with American Indian languages) is the difference in "available cultural concepts." When the cultures are in striking contrast, the curriculum planners must not only consider the teaching of new language but of new ways of looking at the world.

Mackey concludes his paper with the following statement:

> It is only after we have taken all the variables into account and applied appropriate measures of them that we can achieve any degree of certainty in our planning in this important and complex field. Toward this end it is hoped that this preliminary typology may be of some help.

Those of us who have been involved in discussions on bilingual education have often been frustrated because we have recognized that the term is almost meaningless, or, rather, that it has no commonly agreed to meaning. Mackey's paper is a valuable first step in definition.

FOREIGN LANGUAGE ANNALS

Foreign Language Annals, edited by F. André Paquette, the official journal of the American Council on the Teaching of Foreign Languages (ACTFL), is issued four times a year. ESL teachers often overlook this publication as a source for professional enrichment.

Dedicated to all phases of foreign language teaching it provides currently significant information to teachers, educators, and researchers on all educational levels and on many languages. To serve this purpose effectively, the editors commission articles and invite papers to be submitted. In its special section, "ERIC Clearinghouse on the Teaching of Foreign Languages," there is a regular review of ERIC documents related to developments in foreign language teaching, many of which would be of interest to ESL teachers. For example, in the March, 1970, issue is a report on "Projects Under the New Bilingual Education Program," and a list of bilingual programs by states. In the same issue may be found a U. S. Office of Education list of State Coordinators of Bilingual Education Programs.

The May, 1970, issue includes a detailed report on handling of manuscripts, circulation, and sales of back issues. Subscriptions may be ordered from ACTFL, 62 Fifth Avenue, New York, N. Y. 10011; single copies, $2.00; annual subscription, $8.00.

STATEMENT ON BILINGUALISM

by A. Bruce Gaarder

In May of 1967, Dr. Bruce Gaarder of the Office of Education presented a statement on bilingualism to the Special Subcommittee on Bilingual Education of the Committee on Labor and Public Welfare, United State Senate. Because of the impact this statement has had on promoting new programs in this country, we have presented here a brief summary of his arguments in support of the bilingual approach. Limited space has made it necessary for us to condense or paraphrase the language of the original.

1) If English is the sole medium of instruction, the children are likely to become retarded in their school work to the extent to which they are deficient in English.

2) A strong, mutually reinforcing relationship between the home and the school make it necessary that the mother tongue be used by some of the teachers, and as a school language.

3) Language is the most important exteriorization of the self. Rejecting the mother tongue can be expected to affect seriously and adversely the child's concepts of his parents, his home, and of himself.

4) The child's unique potential career advantage, his bilingualism, will have been destroyed if he has not achieved reasonable literacy in his mother tongue. It will be almost useless for him for any technical or professional work where language matters.

5) Our people's native competence in other languages and the cultural heritage each language transmits are a national resource that we need badly and must conserve by every reasonable means.

Dr. Gaarder's statement not only was responsible for promoting increased interest in and direct support of bilingual education. His specific recommendations for implementing new programs have also influenced the design and approach of many of the new programs. The five recommendations are given here in direct quotation:

1) That comprehensive programs of bilingual education in self-selected schools and for self-selected pupils at all school grade levels be supported.

2) That the opportunity to profit from bilingual education be extended to children of all non-English-speaking groups. All are now losers under our present educational one-language policy: at worst they become hopelessly retarded in school; at best, they lose the advantage of mastery of their mother tongue.

3) That adequate provision be made for training and otherwise securing teachers capable of using the non-English tongue as a medium of instruction.

4) That there be provision for cooperative efforts by the public schools and the non-English ethnic organizations which have thus far worked unaided and unrecognized to maintain two-language competence in their children.

5) That provision be made for safeguarding the quality of the bilingual education programs which receive Federal financial assistance.

(Statement by A. Bruce Gaarder, Chief Modern Foreign Language Section, U. S. O. E., May 18, 1967.)

57

READING COMPREHENSION IN BILINGUAL PROGRAMS

Nancy Modiano's study of reading comprehension in Mexico was among the first careful investigations of the consequences of introducing reading in the mother tongue. She reports on her study in The Center Forum, (Vol. 4, No. 1, September, 1969). She compared the reading comprehension in Spanish of Indian children who had attended a bilingual school with that of Indian children who had attended all-Spanish schools.

The report, "Global Perspective: National Languages and Local Vernaculars," is introduced by a survey of worldwide approaches to literacy in countries having large populations who do not speak the "national language." The two chief methods found to be employed were use of the vernacular to teach reading initially, and use of the national language exclusively. Studies support both approaches, but "direct comparisons have been rare and generally have been flawed by poor research designs or methodology."

In the study in Mexico, sample schools for each approach were matched by demographic data, and entire school populations were tested. Two measures were used: 1) teacher opinion in the selection of students who could "understand what they read in Spanish," and 2) a test for reading comprehension in Spanish which was developed for this study and was patterned after standard reading comprehension tests but was based on local cultural materials.

The test scores showed that the children from the bilingual schools, where they had first been taught to read in the vernacular, ranked significantly higher in their comprehension of written Spanish than the children in schools where reading had been introduced in the national language. Dr. Modiano attributes the difference to three factors.

1) "The nature of the reading act." Having first learned to read in their own language, the children already had reading skills with which to approach the second language. "When the symbol represents a nonsense syllable learned by rote this is far more difficult and confusing than when it represents a known object; learning to

read in a foreign language is far more difficult and confusing than learning to read in one already known."

2) "Attitudes toward reading in a second language." The learning of a second language is easier for a child if he sees a need for it and if it does not appear "to move him away from his reference group."

3) "Teachers' ability to communicate meaningfully with their students." The students from the bilingual schools had been taught by local Indians who had had little formal schooling and had not thoroughly mastered Spanish themselves. The teachers in the national language schools were native speakers of Spanish, often from other parts of the country. They had had much more schooling, but had more difficulty communicating with their students because they were less "cognizant of the more subtle nuances of the local cultures."

Dr. Modiano's research clearly supports the assumption long maintained by many linguists that reading is most efficiently introduced through the dominant language of the child. It also carries "strong implications for staffing" experimental minority group programs on the elementary level. Apparently, for a reading teacher, mastery of the new language is secondary to a thorough and sympathetic understanding of the local culture.

BILINGUAL SCHOOLING IN THE UNITED STATES

All of our readers who are currently involved or about to be involved in the planning of bilingual projects will want to have the two volumes announced here as basic reference books in their library. Volume One, a monograph by Theodore Andersson and Mildred Boyer, has chapters on the following subjects (we have omitted introduction, definition, and conclusion):

Bilingual Schooling: An Historical Sampling
A Rationale for Bilingual Schooling
Planning A Bilingual Program
The Program
Needed Action and Research
Bilingual Schooling: Implications for Education and Society

The volume concludes with an extensive bibliography and a subject-matter index for the bibliography, a highly useful addition for those not familiar with the field.

Volume Two is a collection of appendices. These include the Bilingual Education Act (Title VII), guidelines for program planning, and guidelines for programs in teacher education. They also include reports on specific language groups. (For example, Appendix S, by Carol Phillips, deals with Indians, Eskimos, and Aleuts.) Of special interest to many will be Appendix W, a directory--admittedly preliminary and incomplete--of resource persons, organizations, and sources of material.

The project was undertaken by the Southwest Education Development Laboratory in Austin, Texas, with support from the U.S. Office of Education. The two volumes are for sale by the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402. The price is $6.00, and the volumes are sold in sets only.

CONTRASTIVE LINGUISTICS AND ITS PEDAGOGICAL IMPLICATIONS
edited by James E. Alatis

The Nineteenth Annual Georgetown Round Table, held at Georgetown University under the auspices of the School of Languages and Linguistics, was devoted to contrastive linguistics and its implications in the classroom. This report of the Round Table contains the papers which were presented at the sessions.

The relevance of contrastive analysis to the effectiveness of language teaching has become a broad subject of debate, and Dr. Alatis and others planning the conference saw in this debate an interesting and productive source of discussions at the Round Table. While at first it was expected that contrastive studies would "provide the basis for more effective classroom practices (in the teaching of foreign languages) by systematically revealing those aspects of the target language which needed particular emphasis through carefully constructed drill," (Alatis p. 1) doubts have been expressed more recently upon the value of contrastive analysis as a pedagogical tool. To ensure a thorough exposure of the problem, scholars representing a wide range of opinion were invited to participate.

The result is an interesting collection of fifteen papers examining all sides of the question of the relevancy of contrastive linguistics to language pedagogy. The term, "contrastive," was defined by John Lotz (p. 9) as the "systematic comparison of certain groups of elements in two (or more) languages, without any reference as to their genetic relationship, typological affiliation and so on."

After introductory remarks by John Lotz, the speakers (some of whom came from abroad for the conference) were:

Robert P. Stockwell
William G. Moulton
H. A. Gleason, Jr.
Robert J. Dipetro
A. Bruce Gaarder
Charles A. Ferguson
Robert Lado
John B. Carroll
Eric P. Hamp
Wilga M. Rivers
J. C. Catford
Robert A. Hall, Jr.
W. R. Lee
W. Freeman Twaddell
Kenneth W. Mildenberger

The report should be of value to every teacher of linguistics, applied linguistics, and foreign languages.

ROUND TABLE AND ESL

Many of our readers will be equally interested in the report of the *Twentieth Annual Georgetown Round Table: Linguistics and the Teaching of Standard English to Speakers of Other Languages or Dialects*, edited by James E. Alatis. (No. 22, 1969). Following the pattern of recent Round Tables, all sixteen of the papers represented at the meeting were focused on the subject announced in the title. In addition to the papers of the Round Table itself, this edition includes the four presented at the Washington Linguistics Club "Eve of the Round Table Meeting," which had as its theme a related topic, "Sociolinguistics and Urban Language Research." Together, the collection provides a large source of bibliography and discussion for the ESL worker who wishes to keep abreast of developments in the field.

Two of the papers which are pertinent to our newsletter theme are:

1) Virginia F. Allen, "A Second Dialect is Not a Foreign Language,"
2) William Labov, "The Logic of Non-Standard English."

CONTRASTIVE LINGUISTICS
AT THE CENTER FOR APPLIED LINGUISTICS

by William Nemser

In the June 1970 issue of *The Linguistic Reporter*, William Nemser summarizes the contributions made by the CAL to the development of contrastive linguistics. His definition of the field is a rather special one, focusing as it does on the practical implications of language comparisons. For him, contrastive linguistics is "the subdiscipline of linguistics concerned with drawing the *pedagogical implications* [italics ours] of structural differences and similarities between languages."

First to be discussed are two books published by the CAL in 1960. Nancy Kennedy's *Problems of Americans in Mastering the Pronounciation of Egyptian Arabic,* and Daniel Cardenas' *Introduccion a una comparacion fonologica del espanol y del ingles*. Then Mr. Nemser describes the Contrastive Structure Series, which was organized by the CAL under a contract with the U.S. Office of Education to produce comparisons of English grammar and phonology with that of the five most commonly taught languages in the US: French, German, Italian, Russian, and Spanish. The French, German, and Italian volumes have been published by the University of Chicago Press; the volumes on French and Russian are being made available through ERIC. (See the Spring 1970 issue of this *Newsletter* for a brief discussion of ERIC.) A by-product of this research was the publication of two bibliographies on contrastive linguistics by the CAL. The most recent of these, by Hammer and Rice in 1965, is currently being updated.

In the next section of the article, Mr. Nemser discusses the CAL's Language Handbook Series. The volumes in this series "were designed to provide concise outlines of the grammatical structures of the major languages of Asia and Africa together with descriptions of their history, sociolinguistic functions, and surveys of their literary traditions." Some of these volumes also presented brief contrastive analyses of the languages concerned with English. Both the Bengali volume and the Swahili volume contain contrastive material; and a volume of Vietnamese, to appear late in 1970, also has some "contrastive information."

Then Mr. Nemser discussed the preparation of *Teaching English to Speakers of Choctaw, Navajo and Papago: A contrastive Approach*. (This volume was reviewed briefly in the Spring 1970 issue of the *Newsletter*.)

In the latter part of the article, Mr. Nemser discusses the present involvement of the CAL with the Yugoslav Serbo-Croation-English Contrastive Project. And he mentions that other projects are in the planning stage, projects involving contrastive studies in Romania, Hungary, Czechoslovakia, Hungary, and Poland. Still other projects "in the planning stage" will deal with a Scandinavian language, an African language, a language of India, and Quechua, a language widely spoken in South America. Finally, in cooperation with the American Council on the Teaching of Foreign Languages, the CAL is in the process of setting up a rapid dissemination service, *Studies in Contrastive Linguistics.* According to Mr. Nemser, "The service will make available, in microfiche and hard copy, studies of practical and theoretical orientation in the field of contrastive linguistics. Titles will be announced and abstracts published in *Foreign Language Annals.*"

One can readily agree with Mr. Nemser's conclusion that "research activity of such scope and variety should yield results with important implications for the field of contrastive linguistics." One may conclude, too, that in view of the many activities described here, the study of contrastive linguistics is very much alive, and that a number of influential linguists and educators obviously are convinced of its pedagogical importance and usefulness.

THE CONTRASTIVE ANALYSIS HYPOTHESIS

by Ronald Wardhaugh

Among the important questions being raised by those designing the language curricula for bilingual programs is the need for and possible application of a contrastive analysis of the two languages that are to be used in the classroom. Linguists in the 40's and 50's would have been almost unanimous in their insistence on priority of contrastive analysis in the preparation of effective teaching materials. Charles Fries, the earliest and at that time the most influential American scholar to write extensively on the principles and methodology of EFL (in those days it was English as a _foreign_ language, makes the following comment in his _Teaching and Learning English as a Foreign Language._ (1945):

> The most efficient materials are those that are based upon a scientific description of the language to be learned, carefully compared with a parallel description of the native language of the learner. (p.9)

In short, Fries says that by comparing the native language of the student with the language to be learned (the target language) it is possible to predict the exact difficulties the learner will encounter, and that the list of difficulties so developed will play a vital role in determining the shape and design of the language lessons. This approach, known as the "contrastive analysis hypothesis," was accepted without question by the majority of linguistics and textbook writers in the 40's and 50's, despite the fact that, as far as we know, no widely used sets of materials were produced that were actually based in detail on full descriptions of the native and target languages involved.

In a recent paper delivered at the TESOL Convention in San Francisco in March, 1970 (to be published in a future edition of the _TESOL Quarterly_), Professor Ronald Wardhaugh of the University of Michigan reexamines the development of the contrastive analysis hypothesis and makes some penetrating observations about its validity--observations that should be considered and weighed with care by all those concerned with materials preparation for bilingual programs. A brief summary of his main points will follow.

Early in the paper, Professor Wardhaugh distinguishes between what he calls a strong version and a weak version of the hypothesis. The strong version, which in theory was adhered to by many, might best be exemplified in a quote from Robert Lado's *Linguistics Across Cultures* (1957):

> The plan of the book rests on the assumption that we can predict and describe the patterns that will cause difficulty in learning, and those that will not cause difficulty, by comparing systematically the language and culture to be learned with the native language and culture of the student. (p.vii)

As Wardhaugh points out, this strong version (which assumes that difficulties can be predicted in advance) "makes demands of linguistic theory, and, therefore, of linguists, that they are in no position to meet." Among other things, it assumes full and completely parallel descriptions of the two languages--descriptions which as yet linguists have been unable to produce.

In practice, Wardhaugh says, the linguists have actually based their contrastive studies on a weak version of the hypothesis. This weak version can be briefly characterized as follows:

1. The linguist begins with a list of mistakes actually made by speakers of X learning Y.

2. He then looks at the languages concerned in order to account for the mistakes and to explain if possible their systematic nature.

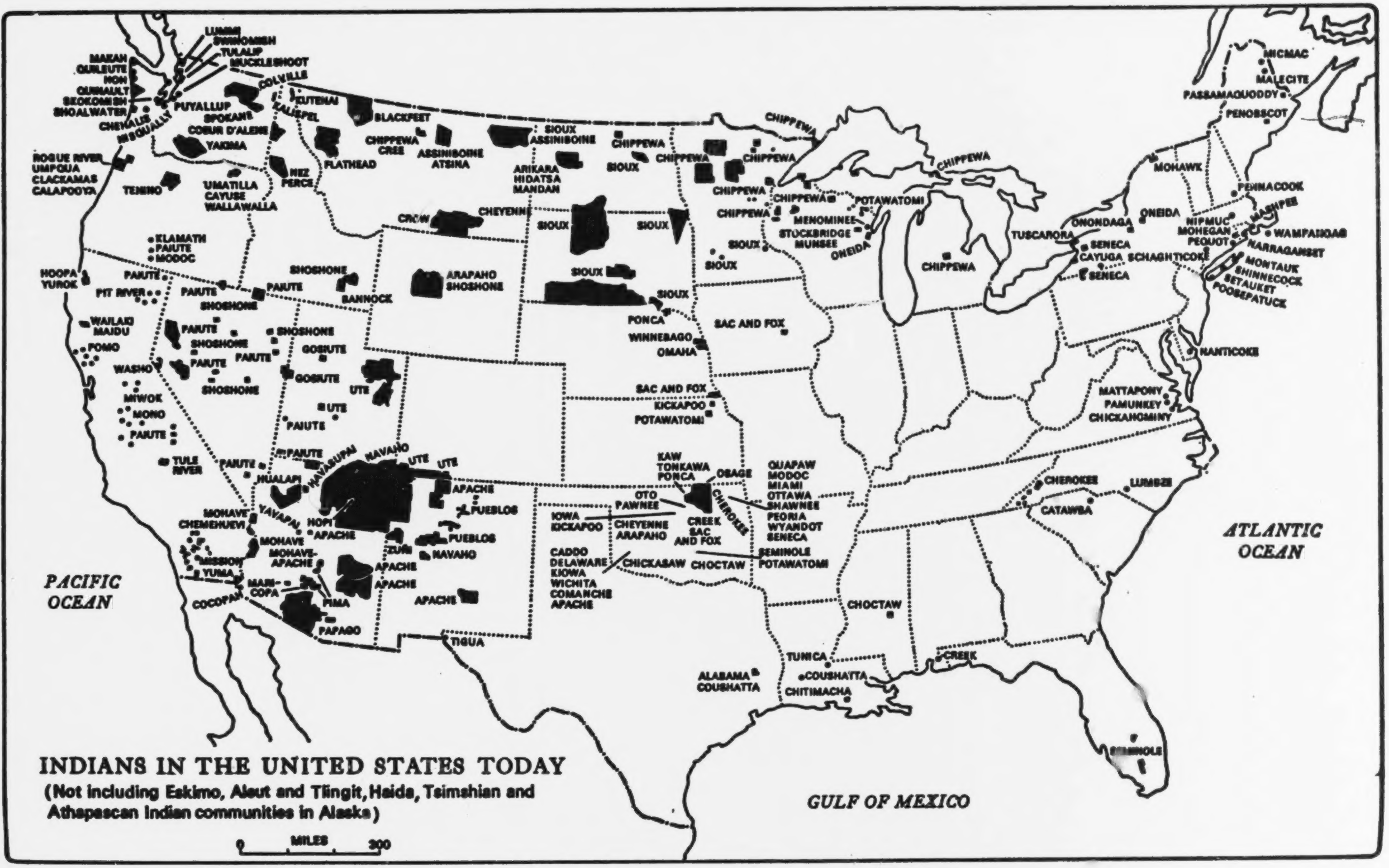
In short, the linguist begins with "actual evidence" and makes no attempt to predict mistake in advance.

This kind of approach seems to hold the most immediate promise for textbook writers and teachers. It is a relatively easy matter for teachers to prepare a list of mistakes commonly made by his students. With help from a linguistic consultant, these mistakes can be ordered and classified. Then a linguist familiar with the first language of the learner can attempt to account for the mistakes by pointing out systematic differences which create interference problems. This approach, at once both practical and modest, makes no extravagant demands on linguistic theory. It has proved useful in the past and will no doubt continue to have a place in bilingual programs.

But even the weak approach to contrastive analysis, Wardhaugh points out, has been called into question. One group of generative-transformation linguists has begun to question whether contrastive analysis has any value whatsoever in second language teaching. Their point, in brief, is that the task of learning another language well, of approximating the competence of a native speaker, involves essentially the knowledge of how deep structures are related to surface structures in that language. Since the process of relating deep to surface structures is unique for each language, there is nothing to be gained by comparing the surface structures of both languages. Such a claim, in its extreme form, would be hard for many experienced teachers to accept. For the experienced teacher knows that his students do make certain mistakes that are caused by interference from the first language, and that these mistakes merit systematic treatment in the classroom.

Another group of generative-transformation grammarians have attempted to work "within the weaker version" of the hypothesis and to suggest new approaches to account for such matters as whether the student of a particular language without [ə] will pronounce think with [t] or [s]. Their approach, Wardhaugh feels, holds more promise for the classroom than the work of others who are attempting to identify language universals--"gross similarities between deep structures in a variety of languages."

Wardhaugh concludes his paper by predicting that contrastive analysis will probably have "less influence on second language teaching" in the near future--a prediction, we personally hope, that will not prove to be accurate. In any event, we feel that Wardhaugh's article should be required reading for all those who are preparing materials for the language strand of a bilingual program.



INDIANS IN THE UNITED STATES TODAY

(Not including Eskimo, Aleut and Tlingit, Haida, Tsimshian and Athapascan Indian communities in Alaska)

0 MILES 300
PACIFIC OCEAN
ATLANTIC OCEAN
GULF OF MEXICO
LUMMI
SWINOMISH
TULALIP
MUCKLESHOOT
MAKAH
QUILEUTE
HOH
QUINAULT
SKOKOMISH
SHOALWATER
CHEHALIS
NISQUALLY
PUYALLUP
COLVILLE
SPOKANE
COEUR D'ALENE
YAKIMA
KUTENAI
KALISPEL
BLACKFEET
ROGUE RIVER
UMPQUA
CLACKAMAS
CALAPOOYA
TENINO
UMATILLA
CAYUSE
WALLAWALLA
NEZ PERCE
FLATHEAD
CHIPPEWA CREE
ASSINIBOINE ATSINA
SIOUX ASSINIBOINE
ARIKARA
HIDATSA
MANDAN
CHIPPEWA
SIOUX
CROW
CHEYENNE
KLAMATH
PAIUTE
MODOC
HOOPA
YUROK
PIT RIVER
WAILAKI
MAIDU
POMO
WASHO
MIWOK
MONO
TULE RIVER
SHOSHONE
BANNOCK
ARAPAHO SHOSHONE
GOSIUTE
UTE
HAVASUPAI
NAVAHO
HUALAPI
MOHAVE
CHEMEHUEVI
YAVAPAI
HOPI
APACHE
MOHAVE-APACHE
MISSION
YUMA
COCOPAH
MARI-COPA
PIMA
PAPAGO
ZUÑI
PUEBLOS
TIGUA
PONCA
WINNEBAGO
OMAHA
SAC AND FOX
KICKAPOO
POTAWATOMI
KAW
TONKAWA
PONCA
OSAGE
OTO
PAWNEE
IOWA
KICKAPOO
CHEYENNE
ARAPAHO
CREEK
SAC
AND FOX
CHEROKEE
CADDO
DELAWARE
KIOWA
WICHITA
COMANCHE
APACHE
CHICKASAW
CHOCTAW
QUAPAW
MODOC
MIAMI
OTTAWA
SHAWNEE
PEORIA
WYANDOT
SENECA
SEMINOLE
POTAWATOMI
ALABAMA
COUSHATTA
TUNICA
COUSHATTA
CHITIMACHA
CREEK
SEMINOLE
MENOMINEE
STOCKBRIDGE
MUNSEE
ONEIDA
TUSCARORA
ONONDAGA
SENECA
CAYUGA
SCHAGHTICOKE
MOHAWK
MICMAC
MALECITE
PASSAMAQUODDY
PENOBSCOT
PENNACOOK
NIPMUC
MOHEGAN
PEQUOT
MASHPEE
WAMPANOAG
NARRAGANSET
MONTAUK
SHINNECOCK
SETAUKET
POOSEPATUCK
NANTICOKE
MATTAPONY
PAMUNKEY
CHICKAHOMINY
CHEROKEE
LUMBEE
CATAWBA

Map by Jean Paul Tremblay from THE INDIAN HERITAGE OF AMERICA by Alvin M. Josephy, Jr. (C) Copyright 1968 by Alvin M. Josephy, Jr. By permission of Bantam Books, Inc.

SIL LINGUISTS CURRENTLY WORKING WITH NORTH AMERICAN INDIAN LANGUAGES

A number of American Indian languages still do not have alphabets, nor do they have the grammars and dictionaries that could serve as basic references for those who are involved in the preparation of the introductory reading materials for bilingual classrooms. The field work that is presently being carried out by linguists from the Summer Institute of Linguistics will be invaluable in providing background information for the preparation of beginning readers in a number of important language groups.

Dr. Irvine Davis, Director of the North American Branch (Box 68, Eastlake, Colorado 80615) has provided us with the following list of names and addresses of SIL field workers. In a letter accompanying the list, Dr. Davis says:

> In the United States proper, those who have been involved to the greatest degree in literacy and bilingual education include Miss Faith Hill, who is now involved in an adult literacy program at the government Navajo school in Tohatchi and who has had wide experience with the Navajos and Apaches in the Southwest; Curtis Cook, who has cooperated with local schools in this area; Ray Gordon, who is becoming involved in the projected bilingual program for the Crow; Dean Saxton, who has taught Papago extension courses through the University of Arizona; and Dr. Randall Speirs, who has acted as a consultant for certain programs in New Mexico. Most of the others have done at least some preliminary work in literacy.

Anyone interested in more detailed information about the studies currently underway may write directly to the field workers on the list.

SUMMER INSTITUTE OF LINGUISTICS -- North America Branch

ALASKA
Base: Box 1028, Fairbanks, Alaska 99701
Eskimo: Dave Shinen, Box 629, Nome, Alaska 99762
Wilfried Zibell, Noorvik, Alaska 99763

ALASKA con't.

Kutchin: Dick Mueller, Box 68, Fort Yukon, Alaska 99740
Koyukon: Dave Henry, Box 1028, Fairbanks, Alaska 99701
Upper Kuskokwim: Ray Collins, Rural Branch, Nikolai, Alaska, 99691
Upper Tanana: Paul Milanowski, Mile 1284 Alaska Highway Via Delta Junction, Alaska 99737
Tlingit: Misses Constance Naish and Gillian Story, Bletchingley Road, Merstham, Redhill, Surrey, England.

CANADA

Dogrib: Herb Zimmerman, Box 551, Yellowknife, N.W.T.
Slave: Vic Monus, Box 1505, Hay River, N.W.T.
Beaver: Marshall Holdstock, Goodlow, B.C.
Sekani: Dave Wilkinson, Ware, B. C.
Carrier: Dick Walker, Box 365, Fort St. James, B.C.
Babine: Henry Hildebrandt, Box 586, Burns Lake, B.C.
Stoney: Warren Harbeck, Box 32, Morley, Alberta
Blackfoot: Don Frantz, Box 24, Arrowwood, Alberta

UNITED STATES

Cocopa: Tom Nevers, Box 430, Somerton, Arizona 85350
Papago: Dean Saxton, Box 368, Sells, Arizona 85634
Hopi: Jonathan Ekstrom, Box 1207, Winslow, Arizona 86047
Navajo and Western Apache: Miss Faith Hill, Box 7 Tohatchi, New Mexico 87532
Ute: Jack Green, South Route, Cortez, Colorado 81321
Taos: Dave Hull, Box 1141, Taos, New Mexico 87571
Tewa: Randall Speirs, Rt. 2, Box 60, Espanola, New Mexico 87532
Jemez: Misses Bea Myers and Hazel Shorey, 2623 Sixth Street, Albuquerque, New Mexico 87107
Zuni: Curtis Cook, Box 555, Zuni, New Mexico 87327
Mescalero Apache: Miss Elaine Clark, Box 253, Mescalero, New Mexico 88340
Northern Paiute: John Anderson, Box 51, McDermitt, Nevada 89421
Crow: Ray Gordon, Crow Agency, Montana 59022
Mikasuki Seminole: Dave West, 349 Mission Road, Glendale, California 91205

70

AMERICAN INDIAN LANGUAGES
NOW IN USE

For people concerned with teaching English to Indians, a list of the Indian languages which are spoken by more than 1000 people in the United States today might help in defining which teaching approach would best serve the purposes of the people who are learning. The following list was selected from one prepared in 1962 by Professor Walter L. Chafe for the Bureau of American Ethnology. The report of his survey was published under the above title in International Journal of American Linguistics, Vol. 28: 162-171. A later correction of this list was published in 1965, Vol. 31: 345f, and has been incorporated into our list. In addition, we have used a list from Dr. Wick R. Miller, where possible, to indicate affiliation with the major language families of the United States.[1]

Dr. Miller has pointed out that many figures which would be useful to educators and administrators are difficult to obtain because of the problems involved in matching speakers with reservations or with other administrative units. BIA records help only in the rare cases where administrative units, cultural units, and linguistic units match. Frequently two or more groups were removed to the same reservation, resulting in "intermarriage and Indian bilingualism (between two Indian languages)." As Miller points out, this kind of language situation presents a complex problem for the nose counter.

One example of the complexity of census taking can be found in the Report of the Commissioner of Indian Affairs, (1900):

> This is the first time that the Bannock and Shoshoni tribes have been reported together, the population of the two tribes having always been reported separately. They are so intermarried and related to each other that it is nearly impossible to distinguish one from the other, many individuals being the offspring of intertribal marriages.[2]

Dr. Miller has compiled a list of the largest and most extensive language families in terms of present day speakers and states that at a distant time level, some of the families were related to each other or to other families.

1. Eskimo-Aleut
2. Athabaskan
3. Salish
4. Penutian
5. Hokan
6. Uto-Aztecan
7. Kiowa-Tanoan
8. Zuni
9. Keresan
10. Siouan
11. Caddoan
12. Muskogian
13. Iroquan
14. Algonquian-Ritwan[3]

Chafe groups the age of the speakers into three classes in which the majority of speakers are 1) all ages, 2) over 20, and 3) over 50. He also gives numerical estimates of the number of speakers of each language, ranging from one to several thousand. We have chosen from his list only those languages which are thought to have at least 1000 speakers of all ages, believing these to be the ones most likely to be concerned with the bilingual teaching or learning of English. Since adequate bilingual programming usually entails long-term expenditures of time and effort in collecting language samples, preparing and producing materials in the native language, and implementing a good program, perhaps an approach of more practical value could be found for those children whose native language is spoken by fewer than 1000, especially where the majority of those who do use it are already over 20.

A great amount of more explicit information may be found in the two articles by Dr. Chafe. Our readers may be interested in some of the following points:

1. Dr. Chafe's rationale for distinguishing between languages and dialects,
2. His separate list of over 280 languages and dialects classified according to
   a. number of speakers (five categories: 1-10; 11-100; 101-1000; 1001-10,000; and over 10,000.)
   b. according to age of majority of speakers,
3. His offer to supply information about whether unpublished linguistic information exists about any of the languages.

1. Acoma. See Keresan.
2. Apache. Chirichua. 100-1000. Arizona. Some in Oklahoma. (Athabaskan. All Apache and Navajo are very closely related.)
3. Apache, Jircarilla. Approx. 1000. New Mexico. (Athabaskan)
4. Apache, Mescalero. Approx. 1000. New Mexico. (Athabaskan)
5. Apache, Western. 8000-10,000. Arizona (White Mountain, 3000-4000; San Carlos 3000-4000; Cibecue, approx. 1000; Tonto, approx. 500). (Athabaskan)
6. Arapaho. 1000-3000. Wyoming, Oklahoma. (Algonquian)
7. Assiniboin (Stoney). 1000-2000. Montana, Alberta, Saskatchewan. See also Yankton, Teton, Santee. (Siouan)
8. Blackfoot. 5000-6000. (few children in Montana) Alberta, Montana. (Algonquian)
9. Cherokee. Approx. 10,000. Oklahoma, North Carolina. (Approx. 1000 speakers North Carolina or Middle dialect.) (Iroquois)
10. Cheyenne. 3000-4000. (few children in Oklahoma) Montana, Oklahoma. (Algonquian)
11. Chickasaw. 2000-3000. Oklahoma. See also Choctaw. (Muskogian)
12. Chiricahua. See Apache, Chiricahua.
13. Choctaw. Approx. 10,000. Oklahoma, Mississippi, Louisiana. See also Chickasaw. (Muskogian)
14. Cibecue Apache. See Apache, Western.
15. Cree. 30,000-40,000. Montana, Canada. (Algonquian)
16. Creek. Approx. 10,000 Oklahoma, Alabama. (Seminole approx. 300) (Muskogian)
17. Crow. Approx. 3000. Montana. (Siouan)
18. Dakota. See Santee, Yankton, Teton, Assiniboin. (Siouan)
19. Eskimo, Inupik. 40,000-50,000. Alaska, Canada, Greenland. (Eskimo-Aleut)
20. Eskimo, Yupik. 13,000-14,000. Alaska, (Approx. 900 additional speakers in Northeastern Siberia.) (Eskimo-Aleut)
21. Fox, (including Sac). Approx. 1000. Iowa, Oklahoma, Kansas. (Few children in Oklahoma and none in Kansas.) See also Kickapoo. (Algonquian)
22. Gitksan. See Tsimshian.
23. Gosiute. Included in Shoshoni.
24. Hopi. 3000-5000. Arizona. (Uto-Aztecan)
25. Isleta. 1000-2000. New Mexico. (Kiowa-Tanoan)
26. Jemez. Approx. 1200. New Mexico. (Kiowa-Tanoan)

27. Jicarilla. See Apache, Jircarilla.
28. Keresan. Approx. 7000. New Mexico. (Acoma, 1000-2000; Cochiti, approx. 500; Laguna, approx. 2000; San Felipe, approx. 1000; Santa Ana, approx. 300; Santo Domingo 1000-2000; Zia, approx. 300.) (Keresan)
29. Kickapoo. See Fox. Oklahoma, Kansas (few children) and about 500 in Mexico. (Algonquian)
30. Laguna. See Keresan.
31. Mescalero. See Apache, Mescalero.
32. Mohave. Approx. 1000. Arizona. See also Yuma, Maricopa. (Hokan)
33. Nakota. Included in Yankton.
34. Navaho. 80,000-90,000. Arizona, Utah, New Mexico. (Athabaskan)
35. Niska. See Tsimshian.
36. Ojibwa. 40,000-50,000. Canada, Montana, North Dakota, Minnesota, Wisconsin, Michigan. (Algonquian)
37. Omaha. 1000-3000. Nebraska. (Siouan)
38. Paiute, Southern. 1000-3000. Nevada, Utah, Arizona, California. See also Ute. (Uto-Aztecan)
39. Papago. 8000-10,000. Arizona (extending into Mexico, See also Pima. (Uto-Aztecan)
40. Pima. Approx. 5000. Arizona, Mexico. See also Papago. (Uto-Aztecan)
41. Sac. Included in Fox.
42. San Carlos Apache. See Apache, Western.
43. San Felipe. See Keresan.
44. San Juan. See Tewa.
45. Santee (Dakota proper). 3000-5000. Minnesota, North Dakota, South Dakota, Nebraska, Montana, Manitoba. See also Teton, Yankton, Assiniboin. (Siouan)
46. Santo Domingo. See Keresan.
47. Seminole. Included in Creek.
48. Shoshoni (including Gosiute and Comanche. Approx. 6500. California, Nevada, Idaho, Oregon, Wyoming. (Uto-Aztecan)
49. Stoney. See Assiniboin.
50. Taos. Approx. 1000. New Mexico. (Kiowa-Tanoan)
51. Teton, Lakota. 10,000-15,000. South Dakota, Montana, Manitoba. See also Santee, Yankton, Assiniboin. (Siouan)
52. Tewa. Approx. 2000. New Mexico, Arizona. (Hano, approx. 200; Nambe, 100-200; San Ildefonso 200-300; San Juan, approx. 1000; Santa Clara, 500-600; Tesuque, 100-200;) (Kiowa-Tanoan)
53. Tsimshian. Approx. 3000. British Columbia, Alaska. (Coast Tsimshian has the most speakers. Nishka, and

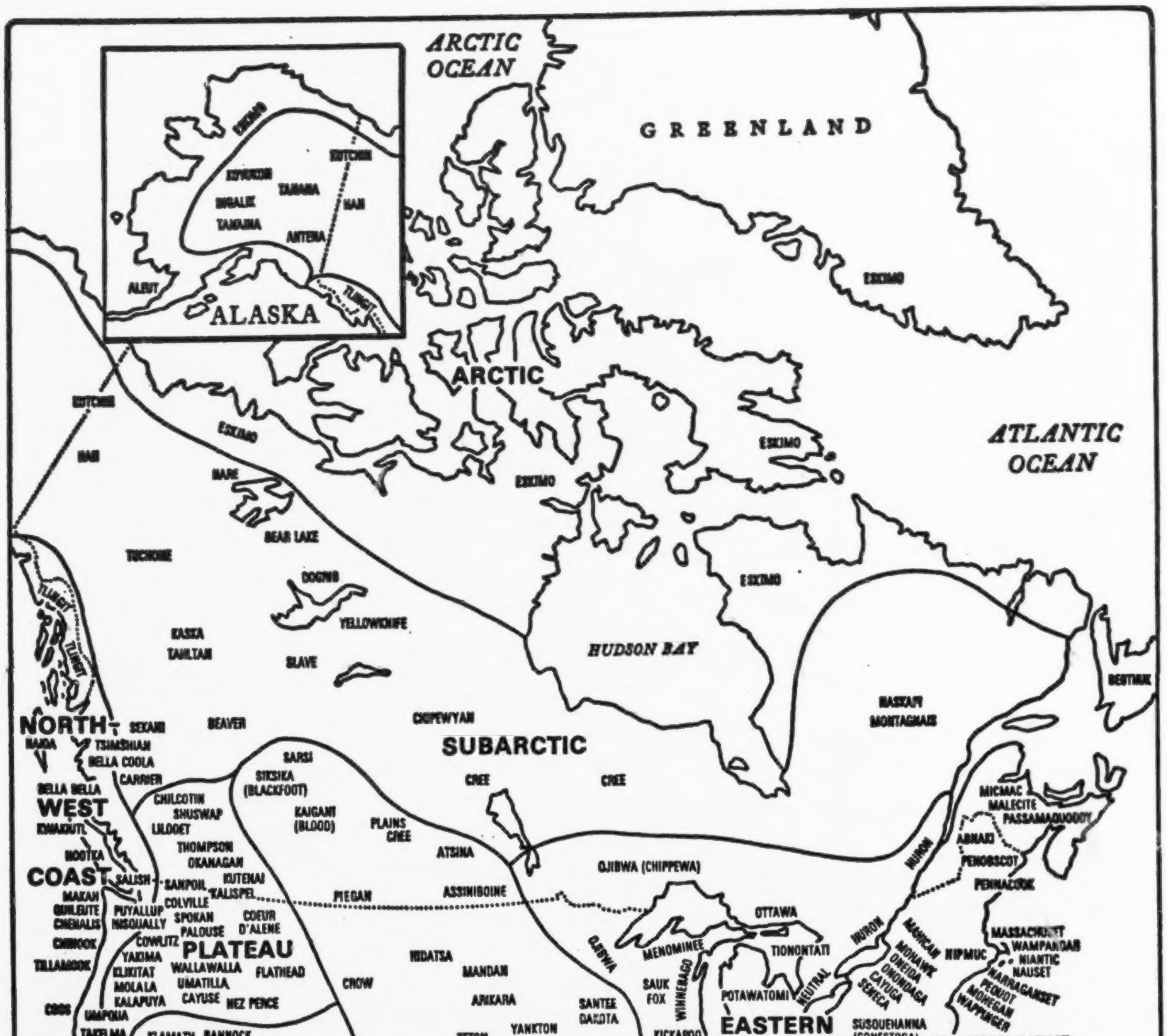
Gitksan have fewer than 1000 each.) (Penutian)
54. Ute. 2000-4000. Utah, Colorado. See also Paiute, Southern. (Uto-Aztecan)
55. White Mountain Apache. See Apache, Western.
56. Winnebago. 1000-2000. Wisconsin, Nebraska. (Siouan)
57. Yakima. 1000-2000. Washington.
58. Yankton. (Nakota, excluding Assiniboin). 1000-2000. North Dakota, South Dakota, Montana. See also Assiniboin, Teton, Santee. (Siouan)
59. Yuma. Approx. 1000. California. See also Maricopa, Mohave.
60. Zuni. 3000-4000. New Mexico. (Zuni)

References:

1. Wick R. Miller, Indian Languages of the United States. Unpublished typescript. University of Utah. March, 1967. 10 pages.

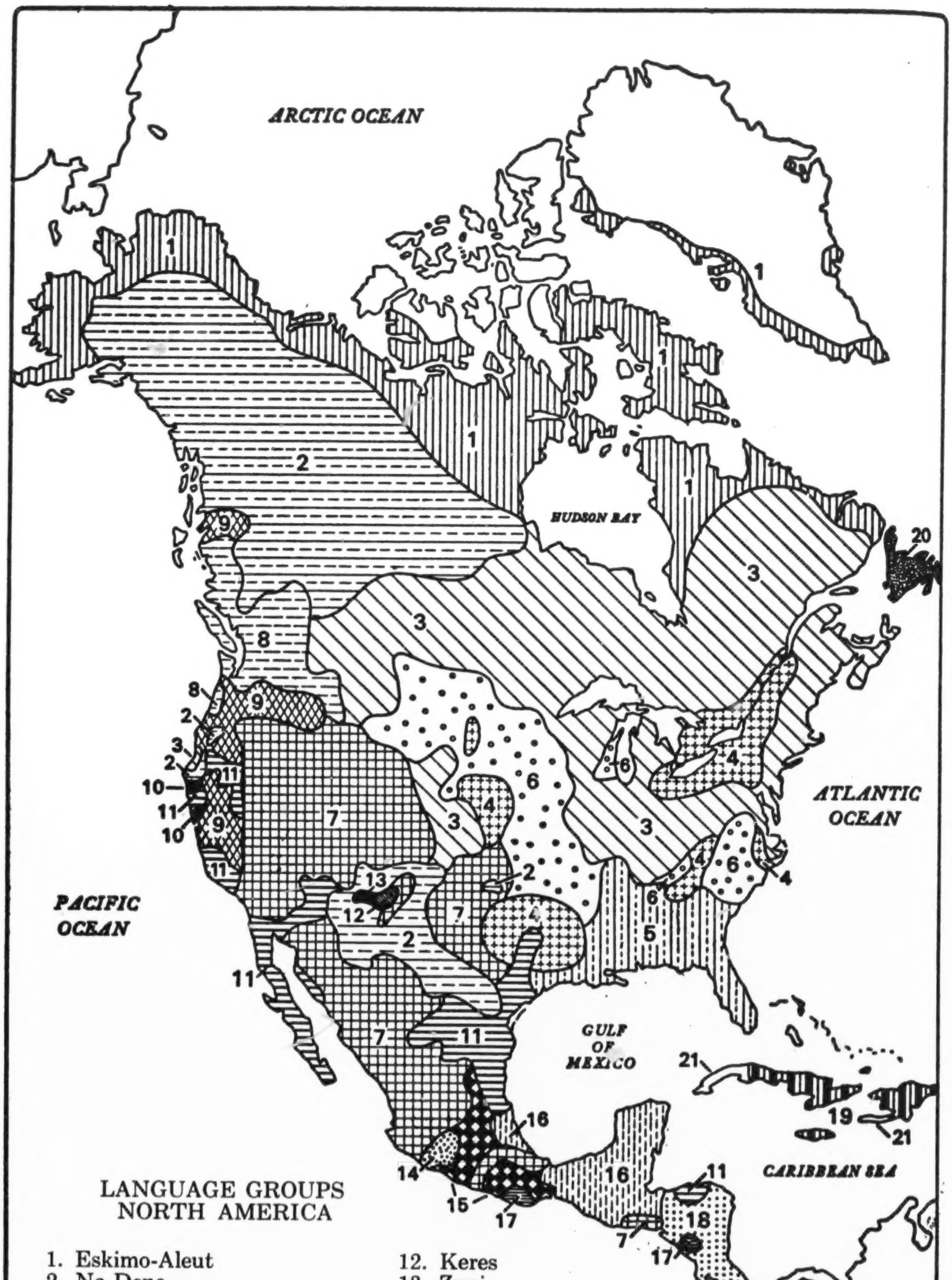
2. Brigham D. Madsen, The Bannock of Idaho. Caldwell, Idaho: The Caxton Printers, Ltd., 1958, p. 325.

3. Dr. Miller indicates his sources as: "Chafe (1962 and 1965), Hoijer (1946), Voeglin (1941), and Voegelin and Voegelin (1964 and 1965). Other sources have been used in occasional cases."


ARCTIC OCEAN
GREENLAND
ALASKA
KUTCHIN
INGALIK
TANANA
TANAINA
AHTENA
HAN
ALEUT
TLINGIT
ESKIMO
ARCTIC
ATLANTIC OCEAN
HARE
BEAR LAKE
TUTCHONE
DOGRIB
YELLOWKNIFE
KASKA
TAHLTAN
SLAVE
HUDSON BAY
NASKAPI
MONTAGNAIS
BEOTHUK
CHIPEWYAN
SUBARCTIC
BEAVER
SEKANI
NORTH-
HAIDA
TSIMSHIAN
BELLA COOLA
CARRIER
BELLA BELLA
WEST
KWAKIUTL
NOOTKA
COAST
SALISH
MAKAH
QUILEUTE
CHEHALIS
CHINOOK
TILLAMOOK
COOS
SARSI
SIKSIKA (BLACKFOOT)
KAIGANI (BLOOD)
PLAINS CREE
CREE
ATSINA
OJIBWA (CHIPPEWA)
MICMAC
MALECITE
PASSAMAQUODDY
ABNAKI
PENOBSCOT
PENNACOOK
HURON
CHILCOTIN
SHUSWAP
LILLOOET
THOMPSON
OKANAGAN
SANPOIL
KUTENAI
KALISPEL
COLVILLE
PUYALLUP
NISQUALLY
SPOKAN
COEUR D'ALENE
COWLITZ
PALOUSE
PLATEAU
YAKIMA
KLIKITAT
MOLALA
KALAPUYA
WALLAWALLA
UMATILLA
CAYUSE
FLATHEAD
NEZ PERCE
PIEGAN
ASSINIBOINE
CROW
HIDATSA
MANDAN
ARIKARA
OTTAWA
MENOMINEE
TIONONTATI
SAUK
FOX
WINNEBAGO
POTAWATOMI
NEUTRAL
MAHICAN
MOHAWK
ONEIDA
ONONDAGA
CAYUGA
SENECA
NIPMUC
MASSACHUSET
WAMPANOAG
NIANTIC
NAUSET
NARRAGANSET
PEQUOT
MOHEGAN
WAPPINGER
UMPQUA
TAKELMA
KAROK
YUROK
WIYOT
HUPA
MATTOLE
POMO
COSTANOAN
KLAMATH
MODOC
ACHOMAWI
ATSUGEWI
SHASTA
YANA
MAIDU
YUKI
WINTUN
MIWOK
YOKUTS
BANNOCK
SHOSHONI (SNAKE)
GREAT
BASIN
PAVIOTSO
GOSIUTE
NORTHERN PAIUTE
WASHO
UTE
KAWAIISU
MONO
PANAMINT
SOUTHERN PAIUTE
CALI-
FORNIA
SALINAN
CHUMASH
SANTEE DAKOTA
YANKTON DAKOTA
TETON DAKOTA
PONCA
IOWA
NORTHERN CHEYENE
PLAINS
PAWNEE
OMAHA
OTO
KANSA
MISSOURI
ARAPAHO
SOUTHERN CHEYENNE
OSAGE
KICKAPOO
KASKASKIA
PEORIA
ILLINOIS
EASTERN
WOODLAND
MIAMI
WEA
PIANKASHAW
SHAWNEE
SUSQUEHANNA (CONESTOGA)
DELAWARE (LENNI LENAPE)
NANTICOKE
PAMUNKEY
POWHATAN
CHICKAHOMINY
MATTAPONY
TUTELO
NOTTAWAY
PAMLICO
TUSCARORA
CATAWBA
CHEROKEE
YUCHI
TUSKEGEE
CREEK
HITCHITI
APALACHEE
YAMASEE
GUALE
TIMUCUA
NAVAHO
HOPI
ZUÑI
JICARILLA APACHE
PUEBLO
KIOWA
KIOWA APACHE
TAWAKONI
WICHITA
QUAPAW
CHICKASAW
SOUTHEAST
CHOCTAW
ALABAMA
NAVASUPAI
WALAPAI
CHEMEHUEVI
MOHAVE
SERRANO
CAHUILLA
YAVAPAI
YUMA
COCOPA
SOUTHWEST
MESCALERO APACHE
PIMA
MARICOPA
WESTERN APACHE
PAPAGO
COMANCHE
CADDO
KICHAI
TUNICA
WACO
TONKAWA
NATCHEZ
HOUMA
ATAKAPA
BILOXI
MOBILE
CHITIMACHA
SEMINOLE
CALUSA
LIPAN APACHE
JUMANO
OPATA
CONCHO
SERI
TARAHUMARA
TOBOSO
KARANKAWA
CAHITA
NORTHERN
TEPEHUAN
MAYO
YAQUI
MEXICO
ACAXEE
COAHUILTEC
TAMAULIPEC
GULF OF MEXICO
TAINO
CIBONEY
PACIFIC OCEAN
WAICURI
PERICU
TEPECANO
CORA
HUICHOL
HUASTEC
MIDDLE
AMERICA
YUCATAN MAYA
CARIBBEAN SEA
CENTRAL AMERICA
AND THE
CARIBBEAN
TOTONAC
TLAXCALAN
TARASCAN
OTOMI
PAME
AZTEC
LACANDON MAYA
MIXE-ZOQUE
ZAPOTEC
MIXTEC
TLAPANEC
CHONTAL
QUICHE MAYA
JICAQUE
MOSQUITO
LENCA
NICARAO
MILES
0
600

CULTURE AREAS
AND TRIBAL LOCATIONS
NORTH AMERICA

Map by Jean Paul Tremblay from THE INDIAN HERITAGE OF AMERICA by Alvin M. Josephy, Jr. (C) Copyright 1968 by Alvin M. Josephy, Jr. By permission of Bantam Books, Inc.


ARCTIC OCEAN
HUDSON BAY
ATLANTIC OCEAN
PACIFIC OCEAN
GULF OF MEXICO
CARIBBEAN SEA
0 MILES 600

LANGUAGE GROUPS
NORTH AMERICA

1. Eskimo-Aleut
2. Na-Dene
3. Algonquian-Ritwan-Kutenai
4. Iroquois-Caddoan
5. Gulf
6. Siouan-Yuchi
7. Utaztecan-Tanoan
8. Mosan
9. Penutian
10. Yukian
11. Hokaltecan
12. Keres
13. Zuni
14. Tarascan
15. Macro-Otomangean
16. Totonac-Mayan
17. Subtiaba-Tlapanec
18. Macro-Chibchan
19. Andean-Equatorial
20. Beothuk
21. Ciboney

Map by Jean Paul Tremblay from THE INDIAN HERITAGE OF
AMERICA by Alvin M. Josephy, Jr. (C) Copyright 1968 by
Alvin M. Josephy, Jr. By permission of Bantam Books, Inc.

GRAMMARS FOR NAVAJO

People who are working on Navajo materials may wish to consult the following four books. Two of them were prepared for use in teaching ESL to Navajos (See this Newsletter, Fall, 1968.): The first one is a course of study in ESL for students above the elementary level; the second is designed to provide teachers with a background of "insight into the world-view of the Navajo" through his language, so that they will be better equipped to teach in a bilingual-bicultural situation.

The other two books are grammars of Navajo. The first is a long-standing classic consisting of a descriptive grammar and a bi-directional dictionary. The second is a new publication for teaching Navajo to speakers of English.

1. Vincent DeNunzio, A Course in Spokane English for Navajos. U.S. Bureau of Indian Affairs, Division of Education, 1967. 4 Vols., tapes and transparencies.
2. Robert W. Young, English as a Second Language for Navajos: An Overview of Certain Cultural and Linguistic Factors. Published jointly by the Albuquerque and the Navajo Area Offices of the BIA. 1967. 169 p.
3. Robert W. Young and William Morgan, The Navajo Language. A publication of the Education Division, BIA) Deseret Book Co., 1969, 348 p. $9.35.
4. Alan Wilson, Breakthrough Navajo: An Introductory Course. Gallup, New Mexico, University of New Mexico at Gallup, 1969. 238 p., with tape. $12.50.

SOCIAL FACTORS IN THE DEVELOPMENT OF SHOSHONI-PANAMINT DIALECTS

The Shoshoni project at the University of Utah is a National Science Foundation sponsored study of dialect formation among the Shoshoni and Panamint speakers of the Great Basin and adjoining areas among social groups with shifting populations, low population density, small groups, and no stratification--factors which differ from those in social groups previously investigated by dialectologists. The project was begun in June, 1966, under the direction of Dr. Wick R. Miller. The primary goals of the project are: 1) to understand the nature of Shoshoni dialects as they existed aboriginally, and 2) to discover how dialect variation arose in this hunting and gathering society.

The methodology consists of examining the situation as it now exists in order to reconstruct the earlier situation from a known base. For the collection of field data, questionnaires were administered to about 100 informants; texts were collected, and the sociolinguistic observations were recorded. The questionnaire is a standardized method for gathering lexical and phonological (phonetic, phonemic, and morphophonemic) information and also includes a short interview of a biographic nature which helps to reveal who is, or has been, in communication with whom. It also reveals when, how often, and for what reason the communication occurred.

William Labov has recently shown by his work that the peer group is extremely important in the language socialization of the child. The work of the Shoshoni project, however, has been concerned with a society in which the peer group is frequently absent. The Shoshoni lived in a sparse environment in which the population was dispersed for most of the year into small, family-sized groups. Larger groups were formed only during short parts of the year when abundant food resources made larger groups possible. In such a band level society, the function of the peer group in language socialization must not have been as central as it is in our own complex and highly stratified type of society. In many cases, among the Shoshoni there was--and still is--no peer group. It has been found that family by family cultural and linguistic variation, persists among the Shoshoni even today. Comparative work has made it possible to discover what linguistic features of Shoshoni have been undergoing variation and what social factors contribute to the linguistic variation.

The work of the Shoshoni project has already yielded information which in itself is useful in linguistic and anthropological studies. This information includes a Shoshoni phonology and a preliminary Shoshoni grammar (both developed by Dr. Wick Miller), extensive ethnographic materials concerning contemporary Shoshoni populations, numerous collected Shoshoni texts, a computerized Shoshoni-English lexicon, and a computerized concordance which gives examples of words in their context within the body of collected Shoshoni texts. Computer programs developed by Sydney Lamb and Laura Gould have been used in this project.

Richley H. Crapo
University of Utah

MATERIALS

A NEW CURRICULUM FOR NAVAJO BEGINNERS

In the 1970-71 school year, nineteen classes of Navajo Beginners will be following the new and highly innovative curriculum that is being developed by CITE. The initials stand for Consultants in Total Education,[1] a private organization devoted to the preparation of materials and the training of teachers in school systems that are emphasizing special programs which also stress a bilingual and bicultural approach. Because the CITE curriculum evolving for the Navajo is a total one, involving all the subjects taught during the entire school day, and because of the complexity and innovation of its design, we feel that it will be of considerable interest to our readers and that it merits more than a brief announcement in this issue.

Background and Rationale

The original idea for this project grew out of two projects: an ESL workshop for 1,000 BIA teachers held in Fort Wingate, New Mexico, in the summer of 1967; and a grant to develop an ESL course for the training of teachers. The workshop and the grant were sponsored by the Navajo Area Office in Window Rock and organized by Dr. Robert D. Wilson, who is on the staff of the English Department at the University of California at Los Angeles and who is now serving as president of CITE, Inc. As the workshop progressed and the ESL course was being developed, it became apparent to Dr. Wilson and his colleagues that a daily ESL lesson, no matter how efficiently designed and skillfully taught, would not in itself begin to meet the needs of the Navajo child. They felt that the child should be allowed to use his native language for learning, and at the same time should be learning to think in English. The solution seemed to lie in a total curriculum, one in which all subjects were carefully planned to fit logically into a total scheme, and one in which the special language needs of the child were constantly kept in mind.

After the workshop, discussion continued with Dr. Wilson and the officials of the Navajo Area Office, chief among them Dr. William Benham. As a result, sources of funding were found in the BIA that permitted Dr. Wilson and his staff to prepare an experimental version of the curriculum for Beginners, which was taught in four pilot classes on the Navajo reservation during the 1968-69 school year. Based on the ensuing evaluations by both teachers and consultants, the materials were revised; and the revised materials were used in seven pilot classes during the 1969-70 school year. In 1970-71, the curriculum will be used in nineteen classrooms. In addition, materials for the first grade language arts are now being developed and are presently being tested in seven first grade classes.

Three of the important linguistic objectives of the program were stated by Dr. Wilson in a speech at the TESOL Convention in Chicago, March 7, 1969:

1. Competence in both adult Navajo and standard English.
2. Detachment toward both languages, the ability to function in either language or either culture whenever he chooses.
3. Ability to use both languages as tools of thought, English for those areas in which he must succeed in high school and college, Navajo for areas associated with his family and community.

In setting up the program, the staff agreed that the following factors are essential:

1. The definition of an adequate philosophy and rationale, which would have to be based on wide reading of available materials on curriculum and learning, as well as on the advice from experts in related fields. (For a list of some of these sources, see the appended bibliography.)
2. Innovations in materials, teaching strategies, and curriculum scope and sequence.
3. Adequate evaluation by teachers, CITE staff, and outside consultants, with subsequent revision and further class testing.
4. Extensive training of teachers and aides in both ESL and the other subject areas of the curriculum.

The rationale that was eventually developed is based on a set of assumptions about four critical areas: cultural, linguistic, psychological, and pedagogical. A CITE paper entitled "Presentation at New Schools, May, 1970" discusses these assumptions in some detail. We have space here only for abbreviated quotations from each set:

A. *Psychological.* There must be mastery of the structure of the subject matter and of strategies on how to learn. Motivation is crucial; the child must see that the need for learning a language is to be able to communicate in it.

B. *Pedagogical.* Pedagogy is scientific in that it predicts terminal behavior; it is *creative* in that it selects the intermediate behavior that will bring about the terminal behavior most effectively. Decoding is emphasized over encoding, initially. For learning to take place, every teaching activity must be interesting and understandable.

C. *Linguistic.* Language is an abstract, self-contained system of obligatory and optional rules. The use of these rules to form sentences is determined by the conventions of communication in a social context.

D. *Cultural.* People need not give up one culture to gain another; they may have a sense of self which enables them to function in any culture which they learn as a frame of reference and of which they have learned the language.

The Curriculum Itself

In a paper read at the 1969 TESOL Convention in Chicago, Dr. Wilson described the CITE curriculum as spiral and *heuristic.* The term spiral means that relations are added to the "systems of knowledge by...going back to the basic concepts of the systems." The term heuristic refers to an emphasis on" learning how to learn." The children are given tools for learning, Dr. Wilson says, by development of sensory perceptions, language skills, and mathematics. They are given strategies for learning by being taught to ask questions, to observe, and to use the empirical method of inquiry, one of forming assumptions based on evidence, and of testing, evaluating, and reformulating those assumptions.

The Beginner curriculum is divided into eight subject areas, which are called strands:

PRINCIPLES	LESSON PARTS	CONVENTIONS
Special Behavioral Objectives: All listed in the Teachers' Manual.	Reveal: Presentation and demonstration of exactly what the learners are to practice.	Through the use of puppets et al., signals are learned for watching, listening, volunteering, and role playing.
Provide appropriate practice. Provide immediate knowledge of results. 90 percent of the class must pass or objective is repeated.	Participation: Teacher calls on volunteers and signals for peer evaluation. Accuracy Test: Volunteers selected at random --about 1/3 of the class.	Children volunteer. Teacher cues children when to talk, participate, or evaluate. Peer Evaluation: Other children use conventional signals for showing that performance is correct or not correct.
Another practice session.	Renew: Objectives are reinforced using activity different from Reveal.	Motor Activity: Game or other physical activity which reinforces lesson.
Testing: 100 percent must pass on second try or lesson is repeated.	Quickness Test: 3-minute timer used to see how many volunteers can successfully perform in that time.	Peer evaluation.

LESSON DESIGN

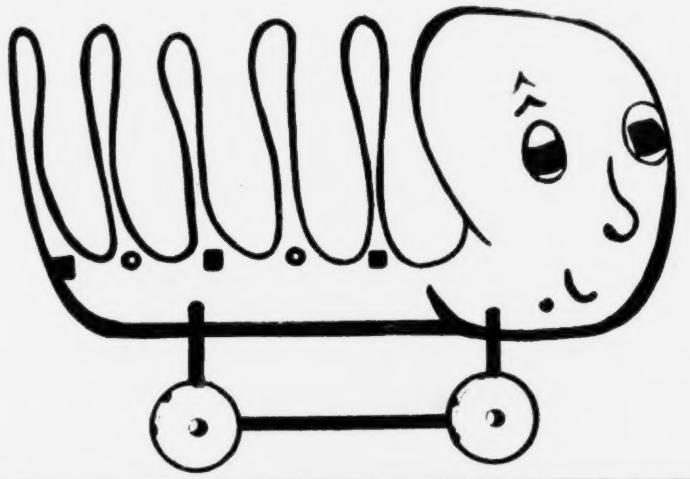
1. syntax (ESL)
2. phonology (ESL)
3. auditory (sensory)
4. visual (sensory)
5. math
6. tactile (sensory)
7. social studies
8. science

All the strands do not get equal emphasis, nor are all of them involved in the program at all times. As the program progresses, different subjects (e.g. reading) are picked up one by one and woven into the total fabric of the curriculum. Some idea of the intricate patterning can be gained by looking at the schedule from the first week.

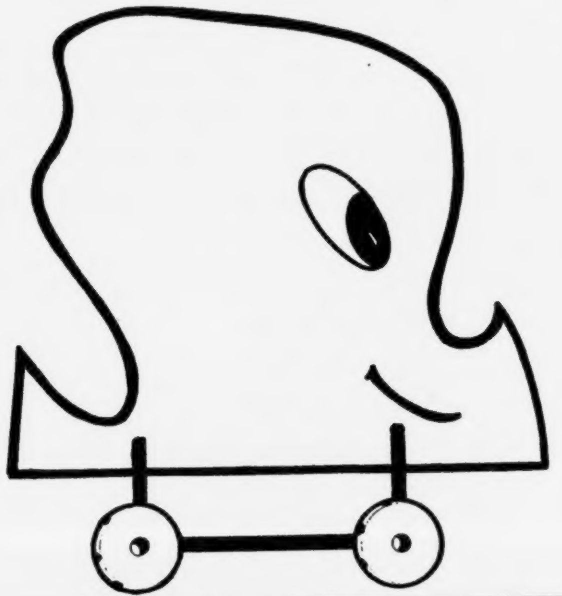
The first week and one-half of school are spent in orientation and such activities as name switching from Navajo to English and English to Navajo, in order to give the child a "bilingual predisposition." Syntax is the first strand to be introduced, followed by a few lessons in phonology. By the beginning of the fourth week there are three strands alternating through the day -- syntax, phonology, and auditory, the first of the sensory strands. The auditory strand was given priority among the sensory strands in order to balance what appears to be the child's tendency to emphasize the use of the visual sense in learning. Next to be introduced are the visual and math strands, followed by tactile and social studies. The last to be introduced is science, at the thirtieth week. At the eighteenth week, the daily sequence is:

1. syntax
2. math
3. visual
4. auditory
5. tactile
6. syntax
7. social sciences
8. free period

Because most of the other subjects are learned through English, work on syntax and phonology get the major part of the attention during the first fifteen weeks, with the Navajo teacher or aide conducting discussions or explanations in Navajo. In general, the plan is to introduce structure and vocabulary several lessons in advance of the time they



pit



peat

are needed in the other strands. Occasionally, where a structure or a word is needed in a strand and cannot be incorporated into the language lessons in advance, a special ESL lesson is introduced to handle the new language items. The syntax lessons focus on sentence structures, while the other strands focus on word attack skills, and phrases.

It is difficult in short space to summarize the content and objectives of each strand. However, the list below, abstracted from a CITE paper ("Presentation at New Schools Using CITE Materials...Part II", May, 1970) may give our readers at least a general idea of what is covered in the program.

1. Syntax. The ESL strands, syntax and phonology, are so designed that for the first eleven weeks the child is not obliged to say anything in English. The syntax is initiated by use of simple imperatives to which a non-verbal response is easily demonstrable by the use of puppets, etc. The child later learns to respond to more complicated commands, yes-no questions, wh- questions, etc., by physical action or a nod or shake of the head. After the eleventh week, the child still is encouraged to participate verbally, but on a voluntary basis. Verbal participation from then on in all strands is partially voluntary and partially by random selection.

2. Phonology. This includes pronunciation of simple vowels and diphthongs, consonants and consonant clusters. It also involves phonological processes involved in word inflection and derivation.

3. Auditory. Here the children listen to speech and non-speech sounds and learn to distinguish such things as tempo, pitch, rhythm, order, and intonation patterns.

4. Visual. Here the children learn to recognize and reproduce visual configurations, to perceive symbols, including letters of the alphabet, to recognize left to right ordering, etc. This strand lays a foundation for plane geometry as well as for reading.

5. Math. For the math strand, CITE utilizes a program already published, Sets and Numbers, by Suppes and Suppes. The language is adapted somewhat for ESL learners; and the child works with concrete objects before being presented with the abstract concepts in the workbook.

6. Tactile. Here the children explore the sense of touch, learning such concepts as round and flat, rough and smooth. The tactile strand provides necessary concepts and language structures for the science strand that follows it, and establishes a "predisposition" for solid geometry.

7. Science. Here the children become familiar with such processes as observing, using space/time relationships, measuring, classifying, inferring, and predicting.

The lessons in all strands follow a smilar pattern. (See the lesson design on page 74.) They are planned for the achievement of a specific objective in a period of about 20 minutes. For example, a phonology lesson may use whimsical figures to demonstrate a minimal pair such as tot and dot. (See the whimsical figures on page 76.) A 20 minute lesson might be organized around this pair, at the end of which the children are tested to see if they are able to recognize and produce the relevant contrast.

Peer evaluation is an integral part of each lesson. The children listen carefully to the individual responding and use conventionalized signals to show whether they think the answer is correct or not. CITE believes the purpose of peer evaluation to be:

1. It keeps all the children actively participating.
2. It gives the volunteer immediate feedback on his performance.
3. He is aware of being tested.

Each 20 minute lesson is followed by 20 minute break in which the preceding practice is reinforced in a more informal context. It also provides time for language and culture "switching" for the children are free to play in either the Navajo corner or the English corner of the classroom, to carry the typical toys and objects from one to the other, and to use any language they choose.

Teacher Training

The training of teachers is a very important aspect of the CITE program. This training not only has the immediate goal of insuring effective use of the new materials. It has a significant, long-range goal, that of preparing a "curriculum teacher" -- a teacher so familiar with the principles underlying the curriculum and with the techniques of using them that he will be able to change the program and develop new materials when necessary. The curriculum teacher, in short, can evaluate, revise, and innovate. The new teacher receives his first training at a two-week workshop on the Navajo during the summer before he is to take over a pilot class. Then training is continued throughout the year in briefer meetings in the area.

Evaluation

The over-all plan for evaluation of the CITE curriculum involves basically a three-year cycle. In the first year, the materials are class-tested in pilot sections; based on reactions of teachers and consultants, the materials are revised for a second experimental year. Once again, the materials are revised and in the third year the program becomes "operational", still subject to more revision and alteration but available to classes on a regular rather than an experimental and trial basis.

Since there are no standardized tests to elicit the kinds of information needed -- for example, progress in cultural switching, learning how to learn, and development of self-image -- The CITE staff has been obliged to design other ways of obtaining data. To collect the reactions of teachers, the staff has devised questionnaires and evaluation sheets. One sheet is a "Record of Lesson Length and Pupil Achievement," on which the teacher indicates whether the 20 minutes period was too long or too short for the achievement of the objectives of the lesson. It will be recalled that each lesson ends with peer evaluation; if less than 100 per cent respond correctly on the second try, the lesson is referred to the writers. A lesson requiring more than one repetition will obviously be either too long or too complicated for the children. A second type of sheet asks the teacher to (1) check the unit objectives with which the children had difficulty; (2) describe the difficulties briefly; (3) comment additionally about the objectives of the unit and (4) judge the suggested teaching procedures by checking a list (effective, satisfactory, or unsatisfactory) and comment additionally on the procedures. These sheets are mailed to CITE headquarters in Los Angeles as they are finished, thus enabling each writer to get prompt feedback on his own strand. They are also circulated to the entire staff in order to help coordinate the work of all the writers.

Evaluation by CITE consultants has also taken place. Qualified staff members have sat in some of the classrooms and taken detailed notes of the activities they observed. And CITE is presently organizing a much more detailed kind of evaluation in consultation with Dr. Wallace Lambert, a well-known Canadian psychologist and authority on bilingual education.

Conclusion

Recently our country has begun to feel more keenly than ever the enormous challenge of designing new and more effective curricula, especially in those contexts which demand a meaningful interaction of two languages and two cultures. The CITE curriculum, because of its imaginative approach in over-all design and in detail, should be of interest not only to specialists in English as a second language and bilingualism but to educators and administrators everywhere.

---

[1] Formerly known as Consultants in Teaching English

MICHIGAN MIGRANT PRIMARY INTERDISCIPLINARY PROJECT

To date, little bilingual material (for use through more than the beginning phase of schooling) has been developed for speakers of American Indian languages. But since all bilingual materials, regardless of language background, will have certain elements in common, we have included here a rather detailed review of one set of materials developed for speakers of Spanish in order to acquaint our readers with some of the principles of organization and curriculum content that might be adapted and modified in the planning of programs for the American Indian.

Recognizing the failure of traditional school programs to meet the needs of non-English speaking children in the primary grades and beyond, the Migrant Program of the Michigan Department of Education, with the cooperation of the Foreign Language Innovative Curricula Studies staff, has developed a three-level oral language program to prepare Spanish-speaking children, both linguistically and conceptually, for normal first-grade work.

Unlike some programs, which stress the exclusive use of the target language in the classroom, the Michigan Program is bilingual at all three levels; that is, important concepts, such as time, space, color, size, shape and function, are introduced first in Spanish, and appear in English lessons only after the children have demonstrated understanding of them and have been exposed to the English language structures necessary to express them. The Pre-School Program roughly alternates English and Spanish lessons; the Kindergarten Program includes separate guides for Spanish and English; and the Primary Program contains a ten-minute Spanish activity for each thirty minutes of English instruction. Further, the entire program is designed for use with a bilingual aide in the classroom to provide additional help to the pupils when needed and to compensate for the regular teacher's possible inadequacies in Spanish.

In all of the prefatory material accompanying this program, the importance of the adaptation to the needs of the particular class is stressed. If the class is not entirely Spanish-speaking, for example, several alternatives are suggested: 1) working separately with the Spanish, 2) including the Anglos in the Spanish lessons, 3) or bringing Spanish-speakers from several classes together for the language lessons. The teacher is further cautioned to expand lessons as needed and to reduce lessons containing structures the children already use with fluency. The important consideration, the guide states, is to achieve the goals of the Program, not to follow it slavishly.

Accompanying the Program is a booklet entitled *Developing Language Curricula*, a brief introduction to linguistic principles for the teacher of bilingual children, including a detailed survey of interference problems of Spanish-speakers learning English. The teacher is also given guidelines for interpreting reading "problems": are they, in fact, problems with reading, or do they constitute phonological interference? Such a contrastive analysis is invaluable for any teacher of bilingual children, but, unfortunately, is available for very few languages.

The sequencing of linguistic material is generally careful, with a structure introduced in one context and then used later to introduce new concepts; that is, in each new lesson, the child has a familiar reference point, whether conceptual or linguistic. For example, in Lesson 8, the children are asked, "Is this block big or little?" --after they have already had the simple *yes/no* question. Later, when direction is introduced, the *either/or* question pattern is again used in an activity with an inclined board: "Are you walking up or down?" In this way, the opposites are related to one another rather than being handled individually.

The development of comparisons provides another example of careful sequencing: Lesson 129 of the Kindergarten Program introduces comparatives with Adjective + *-er*, followed in Lesson 130 by review and Adjective + *-est of all*. The primary linguistic structure of Lesson 131 is: "Which is the ___-est of all," utilizing the new concept in an already familiar pattern. The paraphrastic comparative with *more* appears in Lesson 132, with the words *safe* and *dangerous* to illustrate the contrast between *-er* and *more*. *Safest* and *most dangerous* occupy Lesson 133, and the irregulars, *good* and *better*, are in Lesson 134, followed by best and *bad-worse-worst of all* in Lesson 135.

The entire program has an enormous materials list, including dolls, blocks, cars, trucks, fruits and vegetables, bags and boxes, and hand puppets, as well as the typical classroom materials. The variety of activities requiring the children to manipulate concrete objects should make the contextual restrictions of certain language features more real to them. For example, "What are you doing?" and "Where did you put the balls?" are more meaningful to a child in action than to a child looking at pictures of activity. Other children can be then asked, "Where did he put the (objects)?" after having witnessed the entire action rather than merely a picture of its result.

Throughout the Kindergarten Program, auditory discrimination tasks involving troublesome phonemes appear at intervals. The children are asked to raise their hands when they hear /m/ in final position, for example, or /uw/ vs. /u/, or /i/ vs. /I/. For each work-list they are also expected to repeat the items, the teacher explaining and exaggerating the articulation, if necessary. Since the program does not provide pronunciation and discrimination exercises throughout, this aspect of the acquisition of standard English will probably have to be supplemented in most ESL classes.

The conceptual content of the program is excellent, ranging from naming objects to classifying them according to size, color, shape, function, etc; from naming articles of clothing and identifying the seasons to selecting appropriate clothing because of the weather or climate; and from "have" to "want" to "need" to "prefer." Rhymes are utilized in various ways, including the command "Do something that rhymes with 'bump.'" Greetings, introductions, manners, safety, and personal hygiene are also included, as well as different types of jobs and houses for different types of people. Geometric figures and the mathematical concept of "sets" both utilize and supplement the language practice.

Each lesson is preceded by a list of linguistic and conceptual goals and one of possible interference problems; but the activity itself is in "script" for only one--or at the most, two--dialogue exchanges. One example of sketchy instructions occurs in Lesson 88 of the Primary Program: fruits, such as strawberries, apples and cherries, are grouped by color. "After several items are grouped, encourage new groups by asking if there are any other groups that the class may make. Use Wink [a hand puppet] to whisper suggestions."

A clever, experienced teacher will be able to adapt her own speech to the language level of her pupils; but if reliable results are expected from a program, language structures must be controlled at all times, not just during the ten minute language circle, and not just by experienced teachers. Further, the teacher needs some "patter" to get into the dialogue, to inform the children as to what is expected of them. In this area the Michigan Program seems skeletal.

A final question concerns the evaluation procedure, especially at the Pre-School level. The oral test used is based on the Dade County, Florida, Test of Language Development. The recommended procedure is to select five pupils at random every six weeks or so, and to project their performance by percentages to the rest of the class. In many cases, a given percentage of children performing at a given percentage of accuracy may indicate teacher success; but where the entire educational program depends upon control of the language of instruction, random sampling seems inadequate. In the Kindergarten and Primary Programs as well, responses are anonymously marked "standard" or "non-standard" and percentages computed, when ideally, and especially where an aide is present, the teacher should have individual records of her pupils.

The relevance of this Program to teachers of English to American Indian children lies largely in its basic philosophy of enhancing the home language by means of a bilingual aide and of presenting conceptual material in the home language--in effect, subdividing the child's learning tasks. Instead of magnifying the problems of language learning with a barrage of new concepts, those concepts are mastered in familiar language surroundings, freeing the language lesson for language skills alone. Further, recognizing the home language as a valid means of communication--as opposed to forbidding the native language on the school grounds, as some school districts do--should prevent much of the introversion suffered by bilingual children.

In addition, the Michigan Migrant Project is a storehouse of games and activities which could be used as supplements to any program. Since it is exclusively an oral language program, a separate reading program will be required in any event, and since it is designed to occupy a maximum of forty minutes per day, additional materials are obviously needed. In this respect, it offers itself as a sourcebook in any bilingual program, and as a model for lessons in other home languages than Spanish.

Finally, the interference charts are worth using as models by writers of Indian materials. Reports from public school teachers on the fringes of Indian reservations in Utah indicate ignorance of the sources of pronunciation difficulties of their Indian pupils and, consequently, lack of means to assist them. If, they say, they knew where the problems lay, they would not feel so helpless. Contrastive analyses of English and the various Indian languages would provide this much needed information, just as the Michigan materials provide it for teachers of Spanish-speaking bilinguals.

(*Michigan Migrant Primary Interdisciplinary Project*, American Council on the Teaching of Foreign Language (ACTFL), New York, 1970 (Also published by the State of Michigan Department of Education).

Diana M. Allen
University of Utah

AFLC/HAFB, Ogden